Fatalities of Hispanic Workers: Safety Initiatives Taken by U.S. Construction Companies to Address Linguistic and Cultural Issues

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The U.S. Census Bureau’s projection states that Hispanics form the largest minority group in the U.S. construction industry. A major challenge faced by American construction companies is the continually increasing number of fatalities among its Hispanic workers. According to the literature, illiteracy, the language barrier, and cultural differences are major causes of Hispanic worker fatalities. This study focuses on two out of these three aspects, i.e., language barriers and cultural differences. The study was undertaken to explore the reasons behind the lack of safety awareness of Hispanic workers, and to investigate the measures that construction companies take to deal with this problem. The literature review identified the main issues that need to be addressed by construction companies to ensure the safety of Hispanic workers. A survey was created, asking supervisors/directors of the top U.S. construction companies about their safety initiatives. As a result, it was found that construction companies address the problems of language and cultural barriers by implementing initiatives such as hands-on training, English as a Second Language courses, bilingual trainers, vocabulary cards, social gatherings, and common workshops. This study may help the construction industry identify areas requiring attention in order to improve the safety of its Hispanic employees.

Keywords construction industry, culture, Hispanic workers, language, safety management

Introduction
The U.S. Census Bureau’s projection states that the Hispanic population will form 25% of the entire U.S. population by 2050 (Tossi, 2006). In addition, the U.S. Census Bureau’s 2007 population data shows that there will be 23% Hispanic employees in construction occupations (including extraction, maintenance, and repair), among
the civilian employed population aged 16 and older by 2050 (Hilgeman, 2009). The U.S. construction industry is facing the problem of a lack of skilled labor, and therefore, it has increased its dependency on Hispanic workers (Goodrum, 2004). According to Kochhar (2006), the construction industry has been the major industry to employ Hispanic workers; in fact, Hispanic employment in construction increased from 1.9 million to 3.2 million between 2003 and 2007 (Pew Hispanic Center, 2007). This has helped the construction industry meet its workforce requirement, but at the same time, it has resulted in tremendous challenges for the industry (Potter, 2004).

The construction industry provides 7% of all employment, but accounts for 20% of worksite fatalities in the United States (Henshaw, 2002). While the fatality rate for other groups is declining (Halcraz, 2003), that for Hispanic employees is climbing. According to Cierpich et al. (2008), construction is already a very challenging industry due to its involvement in risky tasks: 34% of job-related fatalities between 2003 and 2006 in the U.S. were in the construction sector. Clearly, additional efforts in terms of safety training are needed, particularly given the increase in the number of Hispanic workers in construction.

Data from the U.S. Census Bureau (2007) indicates that most Hispanic workers do not understand English. Also, Vazquez and Stalnaker (2004), Proctor (2003), Brunette (2004, 2005), and Flory (2001) point out that culture and language barriers play a major role in lack of safety communication and understanding in construction. The focus of this paper is on identifying the factors that are primarily responsible for the lack of understanding of safety issues by Hispanic workers, which results in an increasing number of fatalities among Hispanic workers on construction job-sites. It further analyzes the methods and procedures adopted by major American construction companies for training its Hispanic workforce.

Background

Challenges of a Diverse Workforce

According to Brunette (2004), both cultural and language barriers are the major causes of the increase in number of Hispanic worker fatalities. Brunette (2005) declares that unsafe working conditions, unconcerned supervisors, lack of safety and health training, and inappropriate personal protective equipment in their home countries are also responsible for Hispanic workers’ lack of safety awareness. Brunette (2005) further adds that Hispanic workers hold cultural beliefs and work ethics different than those of non-Hispanic workers, which further exacerbates their understanding of safety concerns. Flory (2001) suggests that not understanding the hazards around them accounts for the major source of fatalities among Hispanic workers, and pinpoints the lack of training provided by construction firms as the cause for it. Arguing that social, cultural, and other “hidden” economic aspects of workers’ injuries have been traditionally neglected by researchers, Brunette (2004) calls for an investigation of the long-term social and economic effects of work-related injuries on Hispanic workers and their families. This study focuses on the specific roles of the language barrier and cultural issues.

Language Barrier

Flory (2001) states that communication is a major problem with a diverse workforce. There is always a chance of confusion, misunderstanding and failure of clarity when
people having different mother tongues interact with one another. Jaselskis (2004) argues that the lack of communication flow between American and Hispanic employees has been proven to be the most common cause of accidents in the construction sector. Along with the language barrier, lack of training, or no training at all, worsens the safety situation for Hispanic workers. “While many regard communication as a basic, straightforward management tool, it is actually one of the most complex aspects of managing a diverse workforce,” declare Loden and Rosener (1991). Vazquez and Stalnaker (2004) attribute these issues primarily to the difficulty of workers in understanding the English language.

Stakes (2006) claims that the lack of English language knowledge makes it difficult for Hispanic workers to understand the instructions given to them by their supervisors; often, these workers nod their heads in agreement even if they do not understand the directions. At the same time, providing proper training is difficult for the contractors whose supervisors do not speak Spanish. Edward (2004) proposes that employers should be engaged in effective training of their Hispanic employees, which must also include an explanation of the cultural value attached to safety. Sanders (2007) recommends that both Hispanic workers and American supervisors try to learn common vocabulary used on construction jobsites, and further adds that the problem of language barrier necessitates a common glossary of correct expressions. Sanders (2007) also explains that it is important to work with key Hispanic employees who are bilingual to help establish the best translations for the local workforce. With their help, a single, effective bilingual document could be prepared to assist in workforce training. Bilingual Latino supervisors may play the roles of trainers, interpreters, and intermediaries (O’Connor, 2002).

Cultural Issues
Halcraz (2003) argues that every worker coming from another country has a different set of beliefs regarding work ethics, family, and company loyalty. Cultural issues, such as desperation to obtain work and money, inability to understand safety policies and procedures, and fear of retribution, are three factors that highly contribute to a high number of fatalities among Hispanic construction workers (Allen, 1991). According to Stakes (2006), many of these workers have been taught that management is never to be questioned, even if they are told to go into a dangerous situation. Challenging authority is considered less than wise, even if the authority is wrong (Vazquez & Stalnaker, 2004).

Dong and Platner (2004) report that family is an important part of a typical Hispanic worker’s life. Smith, Perry, and Moyer (2006) say that even when a Hispanic worker knows that the work is dangerous, he engages in it to support the family back home. In fact, most immigrant Hispanic workers employed in the United States are the sole supporters of not only their immediate families but their distant relatives, too (Kochhar, 2006; Sanders, 2007).

Choudhry and Fang (2008) claim that the increase in U.S. workforce diversity is similar to that in numerous other countries; for example, they report that foreign workers formed 81.2% of the construction workforce of Singapore in 1992. Loosemore and Lee (2002) state, “The consequences of mismanaging culture diversity are serious and include increase stress among the workforce, confusion, frustration and conflict which translates into lower morale, productivity, quality problems and higher accident rates.”
Diversity Initiatives Taken by Construction Companies

Safety training material targeting Hispanic workers in the United States is becoming more and more popular. Some safety initiatives are listed below:

1. Programs recognized and initiated by the Occupational Safety and Health Administration (OSHA)—“According to OSHA’s interpretation of 1910.1200(h), if employers have a training requirement, they must provide it in a language the worker can understand” (Nash, 2004). Organizations such as OSHA demonstrate special concerns for non-English speaking workers, as it has developed bilingual dictionaries for both workers and employers to understand common safety words used at the worksite and thus, to be able to bridge the language barrier. OSHA has also developed an Español Web site for Spanish speaking employees, and online publications such as cards, posters and public service announcements in Spanish (Stakes, 2006). Nash (2004) adds that per a Panel Discussion at the 2004 Department of Labor—OSHA Hispanic Safety and Health Summit, using native bilingual instructors, graphics, videos, color-coded signs, and hands-on-training are effective tools. According to Brunette (2005), OSHA 10- and 30-hour-training programs, along with educational materials on construction safety (to include audiovisuals, CD ROMs, pamphlets, dictionaries, posters, and fact sheets) are effective measures, too.

2. Bilingual initiatives that address cultural issues and construction safety practices—A variety of practices can be adopted by safety directors to bridge the language and cultural gap between workers and their supervisors, including: The Georgia Tech Research Institute (GTRI) has created material to make federally mandated training more effective for Hispanic construction workers. GTRI’s areas of study are divided into five categories: fall protection, scaffolding, trenching and excavation, electrical hazards, and materials handling. This material has been prepared for computer presentation for job orientations and has been distributed through building associations, statewide and regional OSHA offices, and the Hispanic Chamber of Commerce (GTRI, 2004). Furthermore, California’s Working Immigrant Safety and Health Coalition (WISH), with support from the Institute for Labor and Employment, is sharing strategies to protect the health and safety of Hispanic immigrant workers. WISH has begun developing a network of organizations that provide training and support for Hispanic immigrants working in the construction industry (Teran et al., 2002). Additionally, while developing the safety initiatives and training courses, the literature suggests the following issues to be taken into consideration:

   a. Reinforcing the language skills of Hispanic workers—According to Brunette (2004), workers should be given handouts during safety meetings. These handouts should have pictures related to safe work practices and should also include common vocabulary used at construction job sites both in English and Spanish. These handouts should contain more pictures and less verbiage (Sanders, 2007; Stakes, 2006).

   b. Use language spoken by workers—The National Institute for Occupational Safety and Health Fatality Assessment and Control Evaluation (NIOSH FACE, 2004) Report 2004-01, recommends that employers purchase operation manuals and safety handouts which are written in the primary languages used by their workers. All hazard warnings and illustrations written on equipment and manuals for the safe use of products should be available.
in the primary language spoken by workers. The report describes the circumstances of a 23-year-old Hispanic laborer who was crushed between the frame and the arms of the skid steer loader at a rendering plant. The distributor for the skid steer loader informed the investigator that the operator manuals and safety decals for the skid steer loader used in the incident were available in all languages, but since there was an extra charge for manuals in other languages, only the English manual was purchased by the employer. In this case, six employees were Hispanic and spoke primarily Spanish, yet the hazard warnings and operator manual provided with the skid steer loader were in English only.

c. Anglo-speakers become bilingual—Supervisors can learn Spanish language skills, especially the words that are often used to describe safety procedures and methods. Learning key construction terminology and phrases in Spanish will help supervisors communicate better with the workers, and when combined with the Spanish language materials, the safety explanation procedure could become more effective (Stakes, 2006). According to Shearer (2002), it will be easier and more convenient for Anglo-speakers to learn Spanish than to train Hispanic workers in the construction companies to speak English.

d. English as a Second Language (ESL) and Spanish as a Second Language (SSL) courses—Jaselskis (2004) argues that ESL and SSL trainings will improve the communication channels between American supervisors and Hispanic workers. They further illustrate that these trainings will strengthen the supervisor-worker relationship. Vocabulary cards and phrase books are additional effective methods that can be used by companies to help Hispanic workers learn English (Wasieleski, 2007).

e. Using services of professional companies to promote communication—Wasieleski (2007) informs that several professional companies offer construction specific language courses, training programs, translation assistance, and other services that can make cross-cultural communication effective. There are also several language products, specifically created for the construction industry, to teach users vocabulary commonly used on construction work sites.

f. Organizing cultural events—According to Vazquez and Stalnaker (2004), cultural events that involve all workers and their families should be encouraged. Hispanics are typically very close to their families and such events give them a feeling of association with the company and the supervisors. Sanders (2007) states that events should be posted both in English as well as Spanish, because if an event is posted only in English, it sends the message that Hispanic workers need not attend the event. Social events that involve families should be promoted in a way to ensure that non-English-speaking employees understand that “la familia” (the family) is invited and welcome. Holladay (2004) supports the above arguments by saying that when Hispanic workers’ families are involved in the celebrations of workplace success or in social programs, a rapport is built between the Hispanic workers and their non-Hispanic supervisors.

g. Grouping Hispanic workers together—Grouping Hispanic workers together during training may be beneficial for those who cannot comprehend English easily, as workers who do, can explain the document to their fellow workers in their own language (Sanders, 2007).
3. Programs that recognize the dignity of every worker, regardless of background—Forbes (2001) claims that respect should come from the leaders of the construction organizations. They must show in their own words and actions that they believe in the potential of all employees, and that every worker is important to the company, irrespective of their ethnicity, race, background, or any other factor.

4. Programs that give equal respect to all workers, from CEO to unskilled employees—Common safety workshops should be organized for all, ranging from workers to managers. This would help reduce inhibitions in Hispanic workers’ minds and help them open up. It will also make them realize that safety is an important issue, and needs to be practiced by all (Halcraz, 2003).

5. Hands-on training—According to Vazquez and Stalnaker (2004), hands-on training is one of the best ways to overcome language and literacy barriers. Nash (2004) confirms that hands-on training is effective as it allows the trainer to demonstrate the skills needed to use the tools, and then, requires workers to repeat the action. This helps workers learn safety techniques for operating the tools and machinery they are expected to use for their job.

To summarize this discussion, Brunette (2005), Vazquez and Stalnaker (2004), and Smith, Perry, and Moyer (2006) suggest that construction companies dealing with diversity issues should follow the following guidelines:

1. Identify Hispanic workers who cannot speak and understand English, and offer them safety training programs in Spanish, preferably by a Hispanic trainer.
2. Adopt bilingual training processes and bilingual documents, and utilize them whenever required.
3. Provide appropriate safety instructions in relevant languages, especially when work conditions involve risk.
4. Keep training material easy to understand, considering that Hispanic workers might have a low- to medium-literacy level.
5. Avoid direct translations from English; this should be done through bilingual translators.
6. Concentrate on hands-on training and safety practice demonstrations. Maintain low student-to-teacher ratio in these practices.
7. Focus on cultural issues, strengths, and weaknesses of Hispanic employees. When training is delivered, the cultural issues should be addressed by supervisors with experience in multicultural training.

Research Methods

Shearer (2002) suggests that safety related diversity issues can broadly be categorized as: safety communications, supervisor support of safety, safety training, culture understanding, and rapport building. Based on these issues, a questionnaire comprising 19 multiple-choice questions was developed, with an aim to keep the questionnaire as short as possible, so it would not discourage potential respondents from participating. The questionnaire was designed to cover the five major issues, as suggested by Shearer (2002). For each question, three to five possible answers were offered, with an additional one, called “Other,” in case none of the other options was consistent with the respondent firm’s practices. If this answer was chosen, additional space was provided on which the respondent could write a statement.
addressing the issues being asked. Institutional Review Board’s (IRB) approval was secured for this study from the same university which the authors of this paper are associated with.

The sample population consisted of 250 construction companies selected from the list of top 400 contractors published in the May 21, 2007, issue of Engineering News Record (ENR, 2007). These 250 companies were selected based on whether they hire Hispanic employees and apply diversity initiatives to ensure the safety of their employees. This information was gathered through the website of each company, where information related to the company’s safety department, safety policies, and safety records was sought. All 250 construction companies were contacted through general e-mails and phone calls for the purpose of acquiring the contact information of the safety directors/supervisors. Fifty-eight email addresses and phone numbers of safety directors/supervisors from different companies were collected (23.2% of the population of 250) and sent the online survey link. Fifty-one of these 58 safety directors/supervisors responded to the survey, reflecting a response rate of 87.9%. The survey was conducted through an online survey tool (Surveymonkey.com) due to its simplicity of use and being user-friendly. Descriptive statistics methods were used to analyze the data collected from the online survey responses. Corresponding bar graphs were utilized to express the results’ distributions. The responses were compared against suggested safety practices derived from the literature review. Conclusions were derived from these comparisons in order to learn the companies’ focus areas on issues related to the safety of their diverse workforce.

Major Findings

The following paragraphs summarize the results obtained from a survey of 51 safety directors/supervisors of different construction companies in the United States. The results are presented in a manner similar to the structure of the questionnaire, namely, in five major categories of interest: safety communication, supervisor support of safety, safety training, cultural understanding, and rapport building. A summary of the results follows.

Safety Communications

Ninety percent of the respondents feel that the language barrier plays a crucial role in the increasing number of Hispanic worker fatalities. Eighty-four percent of the respondents try to minimize the language barrier by employing bilingual instructors who can help communicate with workers by translating English messages into Spanish and vice versa (see Table 1). More than half of the respondents use bilingual CD’s having graphics and videos, as they realize that these are effective tools which can be used to improve the English communication skills of Hispanic workers, as suggested by Wasieleski (2007) and Brunette (2005). Other respondents stated that they train English speaking supervisors in Spanish by offering Spanish as Second Language (SSL) courses, or that the main policies and safety literature are printed in Spanish to help Hispanic workers understand them better.

Although Wasieleski (2007) suggests that it is easier for Anglo-speaking supervisors to learn English, this study found that about one third of the respondents do not expect Hispanics or Anglo-speaking supervisors to learn the other language.
Therefore, they rely primarily on bilingual instructors to solve the issue of the language barrier between employees.

OSHA 10- and 30-hour training programs are also effective measures to bridge communication and safety knowledge gaps among Hispanic workers (Brunette, 2005). As seen in Table 2, more than 43% of the respondents require Hispanic workers to take the 10- or 30-hour OSHA training, where the second popular training course includes Spanish First Aid/CPR. Still, more than one-third of the respondents do nothing to bridge the communication gap. The survey also revealed that more than 64% of the respondents provide bilingual training through supervisors of the same ethnicity; per Smith, Perry, and Moyer (2006), Hispanic workers benefit most from safety training when it is in their own language. Some respondents replied that they do not provide safety training at all, or that they do not hire employees who do not know English. A couple of respondents said there is no formal safety program in their company, and they often hire only bilingual supervisors.

### Supervisor Support of Safety

As seen in Table 3, about half of the respondents have a supervisor who mainly speaks English and sometimes Spanish, while about one-third of the respondents have supervisors who speak only English. These safety initiatives were also recommended by Stakes (2006), who claimed that lack of knowledge of the English language makes it difficult for Hispanic workers to understand their supervisors’ instructions.

The survey also found that 87.5% of the respondents say that they give equal attention to all the workers irrespective of their ethnicity. This result indicates that a large proportion of supervisors provide support to Hispanic workers in understanding safety practices and in implementing them.

### Table 1. Techniques used to improve English communication skills of Hispanic workers (mark all that apply) \((n=51)\)

<table>
<thead>
<tr>
<th>Technique</th>
<th>Response percent (%)</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilingual CD’s having graphics and videos</td>
<td>58.8</td>
<td>30</td>
</tr>
<tr>
<td>Vocabulary cards</td>
<td>15.7</td>
<td>8</td>
</tr>
<tr>
<td>Bilingual instructors</td>
<td>84.3</td>
<td>43</td>
</tr>
<tr>
<td>Other</td>
<td>47.1</td>
<td>24</td>
</tr>
</tbody>
</table>

### Table 2. After-work education classes companies initiate to aid in bridging the communication and safety knowledge gap (mark all that apply) \((n=51)\)

<table>
<thead>
<tr>
<th>Training program</th>
<th>Response percent (%)</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>English as a Second Language (ESL) course</td>
<td>17.6</td>
<td>9</td>
</tr>
<tr>
<td>Spanish First Aid/CPR training</td>
<td>37.3</td>
<td>19</td>
</tr>
<tr>
<td>Spanish OSHA 10- and 30-hour training</td>
<td>43.1</td>
<td>22</td>
</tr>
<tr>
<td>None</td>
<td>35.3</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>19.6</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 3. Languages generally spoken by supervisors on site (n = 50)

<table>
<thead>
<tr>
<th>Language spoken</th>
<th>Response percent (%)</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>34.0</td>
<td>17</td>
</tr>
<tr>
<td>Spanish</td>
<td>2.0</td>
<td>1</td>
</tr>
<tr>
<td>Mainly English and sometimes Spanish</td>
<td>48.0</td>
<td>24</td>
</tr>
<tr>
<td>Mainly Spanish and sometimes English</td>
<td>2.0</td>
<td>1</td>
</tr>
<tr>
<td>Both languages almost equally</td>
<td>14.0</td>
<td>7</td>
</tr>
</tbody>
</table>

Safety Training

According to Vazquez and Stalnaker (2004), hands-on training is one of the best ways to overcome language and literacy barriers. As seen in Table 4, more than 88% of the respondents recognize the need for hands-on training for their employees to make sure that they understand safe and secure ways of using construction tools. Others mentioned that they use online lectures, video lectures, individual mentoring, and hands-on safety practices as their training methods.

According to Halcraz (2003), holding common workshops for all employees of a company, ranging from workers to top level managers, creates a feeling of trust among all employees. It also helps Hispanic workers to understand the importance of safety learning and the necessity to avoid unsafe work practices. Ninety-four percent of the respondents stated that they organize safety workshops to teach safety rules to everyone in the organization. Some respondents said that they do individual mentoring, or weekly safety meetings, while others use videotapes and online safety courses to provide safety training.

Cultural Understanding

According to Brunette (2005), understanding the cultural and socioeconomic background of Hispanic workers may help supervisors develop more effective materials to educate the Hispanic workforce. As seen in Table 5, more than one third of the respondents still do not make any effort to understand the culture of their Hispanic workers. On the other hand, 56.9% of the surveyed companies organize social events to break the cultural barriers between workers, as shown in Table 6.

Table 4. Methods used to provide safety training (n = 51)

<table>
<thead>
<tr>
<th>Method</th>
<th>Response percent (%)</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching safety rules using PowerPoint presentations</td>
<td>3.9</td>
<td>2</td>
</tr>
<tr>
<td>Hands-on training</td>
<td>5.9</td>
<td>3</td>
</tr>
<tr>
<td>Both teaching safety rules using PowerPoint presentations and hands-on training</td>
<td>82.4</td>
<td>42</td>
</tr>
<tr>
<td>None</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>7.8</td>
<td>4</td>
</tr>
</tbody>
</table>
According to Stakes (2006), Hispanic workers give work the first priority and safety the second, because of their fear of losing jobs and their lack of understanding of safety importance. However, the survey found that more than two-thirds of the respondents do not agree with Stakes’ statements, as they believe that Hispanic workers do not give work the first priority. One of the respondents commented, “Ethnicity does not matter; it all depends on the training and the company’s ability to convey that safety and health and welfare of employees is important.” Family is an integral part of Hispanic workers’ lives and supervisors can increase the sensitivity of Hispanic workers towards safety by telling them that they need to follow safe work practices because their families need them. As seen in Table 7, 82.4% of the respondents try to emphasize the importance of family to inculcate an attitude of safety among their workers. Other companies treat safety as a requirement of the job, whereby workers are asked to follow the safety rules or else leave their job. Other promotion techniques include the widespread use of the phrase “Everybody goes home safe every day,” or providing incentives to those practicing good safety behaviors. A couple of respondents said that they ask everyone on site to watch out for their coworkers.

**Rapport Building**

According to Brunette (2005), building a rapport with Hispanic employees enables them to speak more freely with their supervisors. Sixty percent of the respondents understand the need to build rapport with Hispanic employees, and therefore, organize social events for the workers and for their families. This activity may provide everyone with a platform to socialize and interact with each other, in order to better understand each other’s language, culture, and other traits. The survey revealed that there is still a large portion of construction companies that make no effort to bridge this gap between Hispanic and non-Hispanic workers, and do not encourage social

Table 5. Making special efforts to understand the cultures of the countries from which Hispanic workers arrived (n = 51)

<table>
<thead>
<tr>
<th>Special efforts</th>
<th>Response percent (%)</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>54.9</td>
<td>28</td>
</tr>
<tr>
<td>No</td>
<td>37.3</td>
<td>19</td>
</tr>
<tr>
<td>Other</td>
<td>7.8</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 6. Cultural initiatives taken by companies to break down the cultural barriers between workers (n = 51)

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Response percent (%)</th>
<th>Response count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizing social events</td>
<td>56.9</td>
<td>29</td>
</tr>
<tr>
<td>Initializing potlucks</td>
<td>2.0</td>
<td>1</td>
</tr>
<tr>
<td>Nothing</td>
<td>27.4</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>13.7</td>
<td>7</td>
</tr>
</tbody>
</table>
events that could establish a rapport between workers and their supervisors. Giving incentives to Hispanic employees who are fluent in English is an effective way to develop healthy relations with Hispanic workers and show them the necessity of learning the English language (Sanders, 2007). As seen in Table 8, 60% of the respondents give no special treatment to Hispanic workers who are fluent in English, and treat them as others. Grouping Hispanic workers together is also a way for workers to communicate with each other using their own language; however, this shows some concern on the part of supervisors (Sanders, 2007). The majority of the respondents (71%) to the survey said that they organize worker groups randomly, or on the basis of workers’ merit. If a crew speaks only English, companies try to pair them with a bilingual supervisor. Others said that they promote the fluent Hispanic workers to more responsible jobs such as supervisors, foremen, and mentors for safety training.

**Conclusions**

This article analyzed the safety initiatives construction companies are employing to deal with language and cultural issues. This may help the construction industry to identify where it needs to concentrate in order to improve the safety of its Hispanic employees.

As far as the findings of this study show, companies employ different techniques, such as bilingual trainers and training material, supervisor support, ESL and SSL classes, hands-on training, and organizing social events, in order to provide Hispanic workers with safety training opportunities. Nevertheless, there are very few incentives offered by these companies for Hispanic workers who are fluent in English. Moreover, the cultural initiatives taken by these companies are found to be less
significant as compared to the recommendations made in the literature. Yet, it was found that the majority of the construction companies surveyed make special efforts to understand the cultures of the home countries of Hispanic workers.

One limitation of this study was that only top U.S. construction companies were selected for the survey. Based on the findings of this study, further research could be done on topics such as diversity initiatives practiced by relatively smaller construction companies. Also, in this research, no attempts were made to talk to Hispanic workers themselves to find out how exactly they feel about the diversity initiatives taken by construction companies to reduce the language and cultural barriers between the non-Hispanic workers and their Anglo-speaking supervisors. Further research could be conducted by specifically targeting Hispanic workers as respondents, and studying their perspectives on what should be practiced to teach them safety rules more effectively. This could be helpful for construction companies in understanding the attitudes of Hispanic workers towards safety, and their specific needs and requirements to learn this matter.

This research did not specify the nature of work undertaken by the construction companies participating in the study. Hence, further research can also be conducted by limiting the study, for example, to only high-rise construction projects, where the most common fatality accidents are falls from heights.

With increasing immigration into the U.S., dealing with language and cultural issues has become one of the major challenges for construction companies. The increasing number of Hispanic worker fatalities in the construction industry suggests that not enough measures are taken to confront the linguistic and cultural problems faced by these workers. An ample amount of literature suggests what should be done by organizations to deal with these issues; however, this study did not find an abundance of companies that actually follow these recommendations and take an initiative. Yet, the findings demonstrate that the issues of construction workers’ safety have begun to rank higher and higher on the agendas of construction companies, which can be seen as a positive sign.

Acknowledgments

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