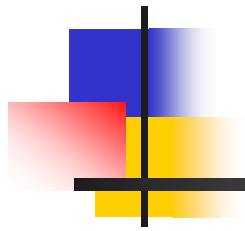


Hispanic Workforce Research Program



IMPROVING CONSTRUCTION WORKFORCE COMMUNICATIONS THROUGH INTEGRATIVE EDUCATION

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Hispanic Workforce Overview



By Rober Ginn

- Population: Hispanics 33% population by 2050 (Wall Street Journal, 2008)
- Median age of Hispanic workers is of 27.2 years. This compares with 36.2 years for the general worker's population (U.S. Census Bureau).
- 15 percent of all the Hispanic labor force work in the construction industry (Nash, 2004)
- Industry employed 2.9 million Hispanic workers in 2006 (**20-25 percent of the total construction employment**) (Sarmiento, 2007).

Background Interest





Phase I: Survey Findings

- Hispanic Worker Background
 - 60% completed education through middle school (30% completed education up to elementary school)
 - 78% have tasks related to concrete and carpentry
 - 51% had none or less than one year of construction experience
 - 23% were involved in accidents
- Language and Training
 - 92% of Hispanic workers would like to learn English for construction
 - 43% of Hispanic workers had already taken an ESL course but thought it was too short
 - 81% prefer technical training in both English and Spanish



Phase I: ESL Course Structure

- Alphabet using construction terminology
- Survival Phrases
- Numbers
- Safety terminology



Phase I: ESL Training

- Understand training needs of Hispanic construction workers
 - Surveyed 97 Hispanic workers
- Prepare and deliver ESL course (6 times) to Hispanic workers
- Concluded that training needs to extend to American supervisors for successful improvement of jobsite communications



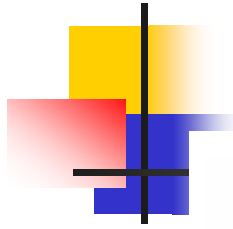
Phase II: Survey Findings

- 60% of American supervisors are in charge of 7 or more Hispanic workers
- 67% of American supervisors considered language to be a main problem with their Hispanic workers
- 76% use a “link” person
- 65% of American supervisors that have taken Spanish thought “it did not meet their expectations”

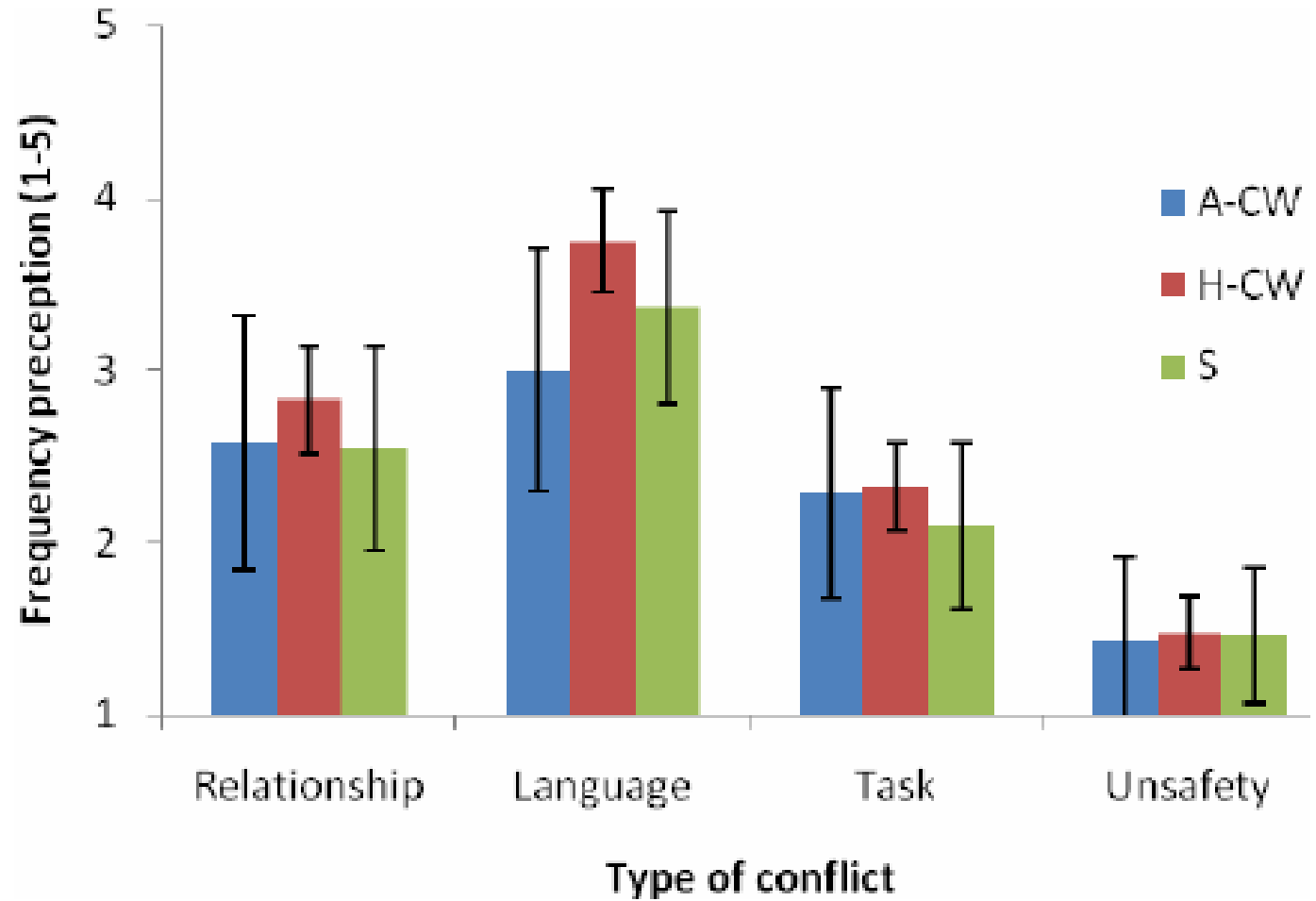


Phase II: SSL Training

- Understand integration issues from American supervisor perspective
 - Surveyed 38 American supervisors
- Prepare and deliver SSL course (twice)
- Concluded that language miscommunications is a problem for both parties—finding the time for training was difficult

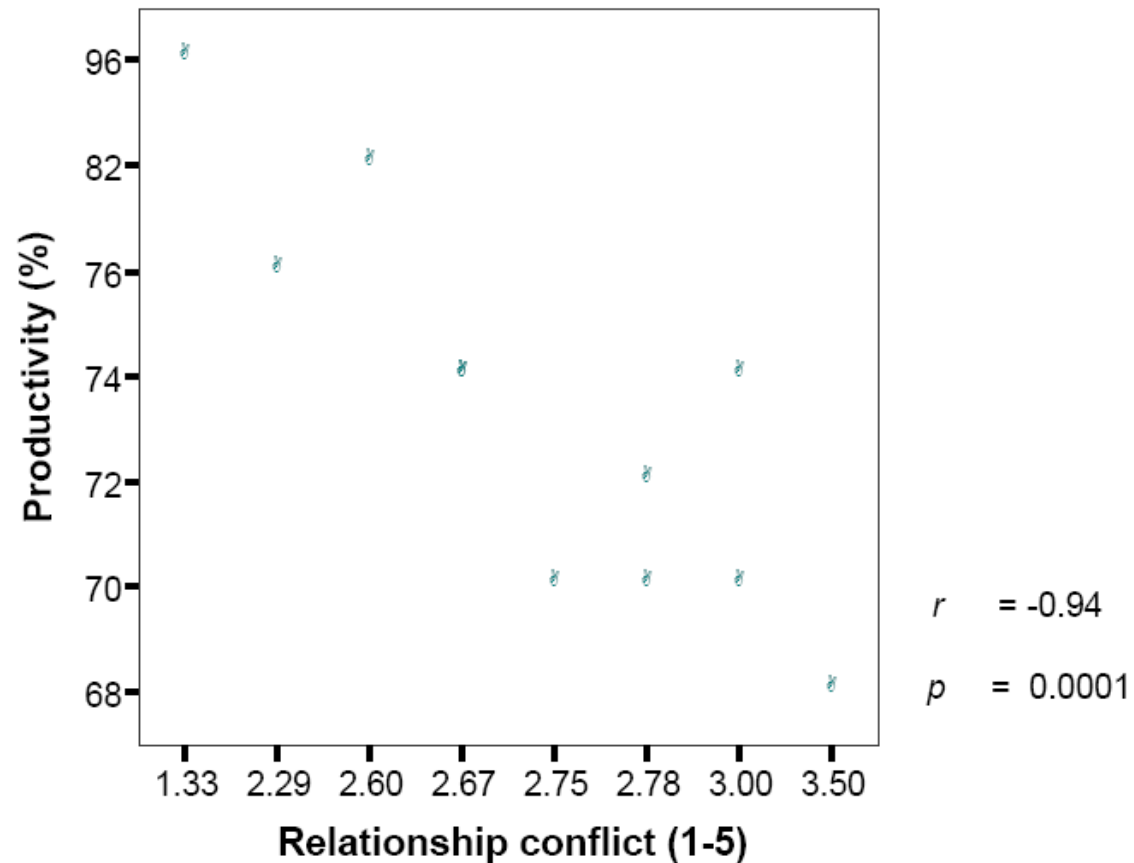


Phase IV: Conflict Frequency



10 crews; 10 supervisors; 49 Hispanics; 30 Americans

Phase IV: Conflict and Productivity



Y: Superintendents rating; X= all workers; 10 crews; 10 supervisors; 49 Hispanics; 30 Americans




Phase III: Training Preferences

- Explore innovative ways to deliver course material developed in Phases I and II
 - Surveyed contractor supervisors, DOT inspectors, and Hispanic workers
- Prepare and deliver short tool box talk courses at the jobsite
- Concluded that working with both groups and on the jobsite would be the best approach- Culture a main factor.



Barriers and Training Solutions

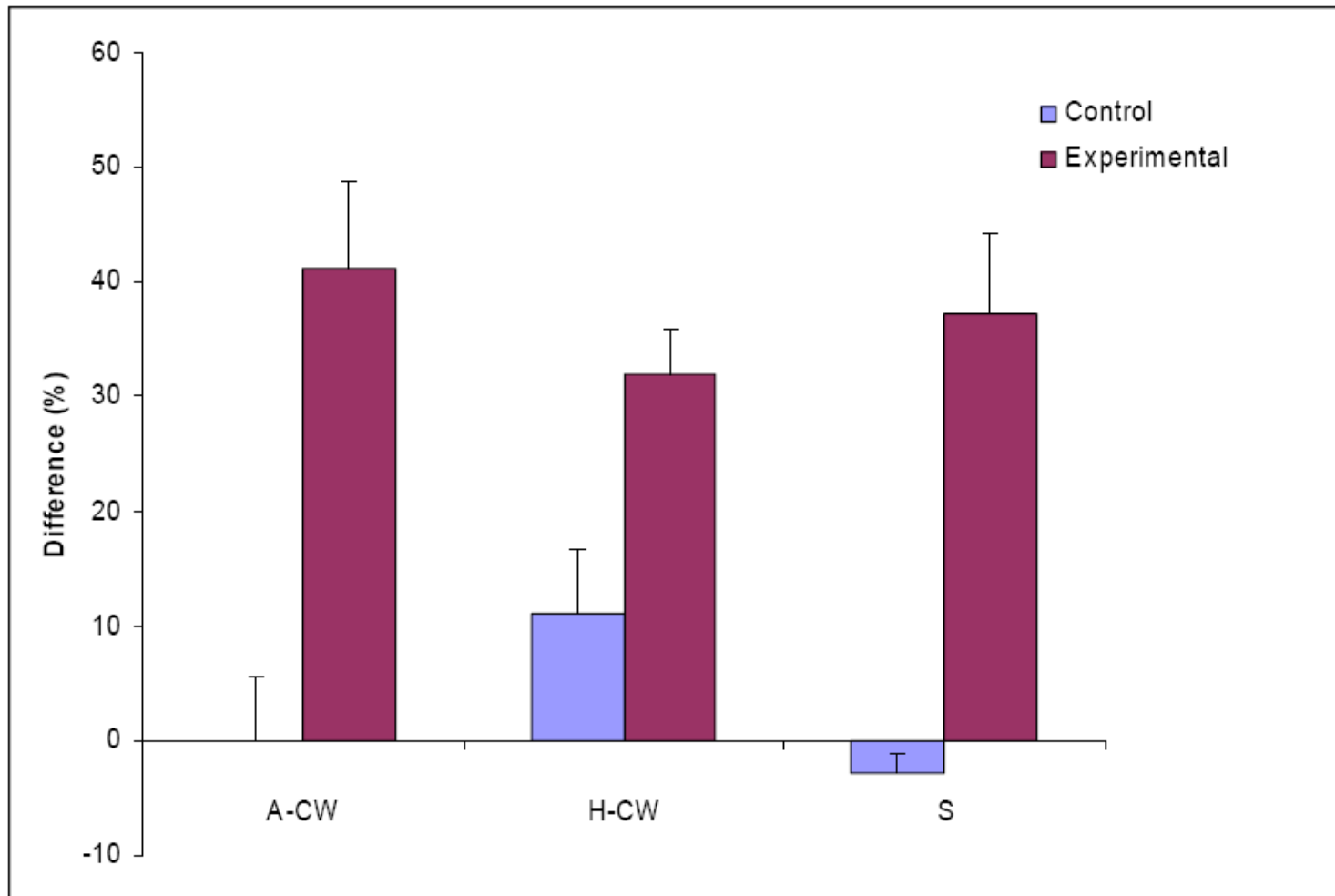
- Barrier: 83% respondents felt there was “little time available” for training
- Solutions
 - Hispanics workers felt that “dedicating more time on a weekly basis was necessary”
 - American supervisors felt that “more commitment” on their part was necessary
 - Most respondents felt that “more construction related training in both languages” was essential for both parties



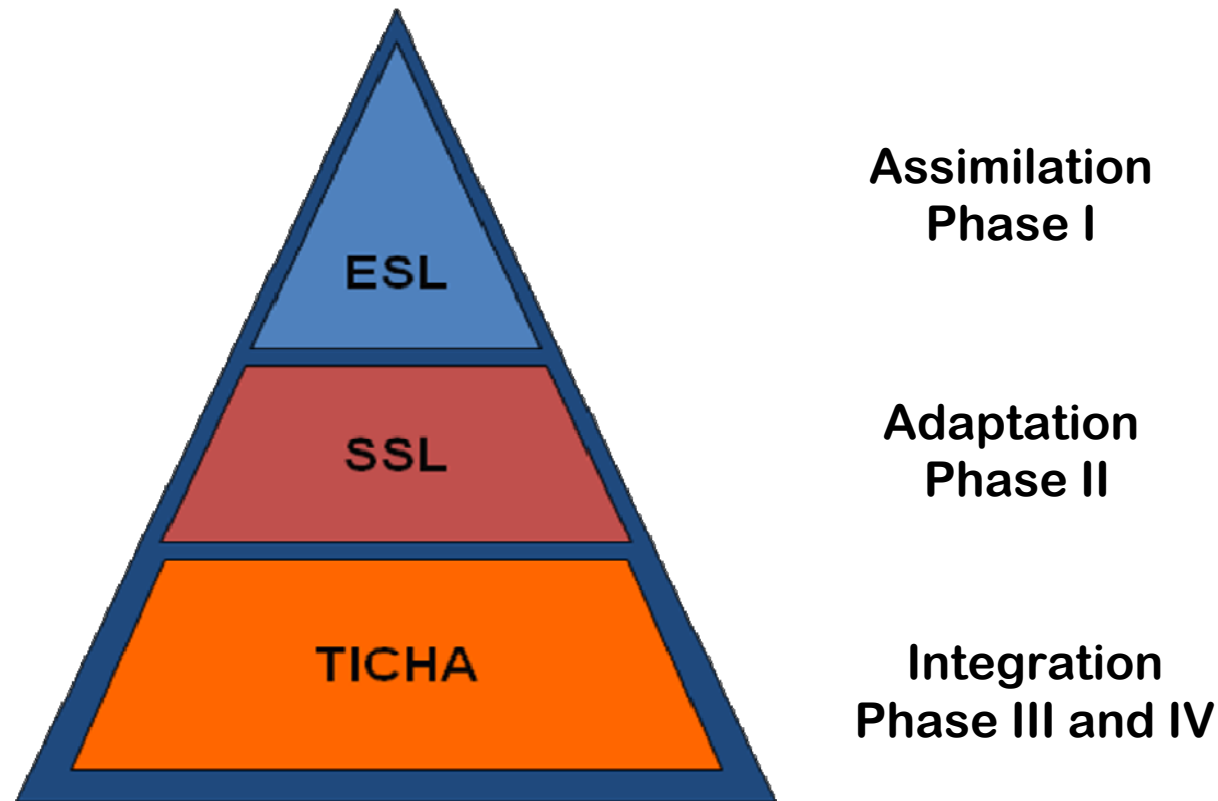
Development of Toolbox Integration Course for Hispanic Workers and American Supervisors (TICHA)

- Contains quick references, including English and Spanish spelling and pronunciations
- Includes survival phrases
- Addresses cultural differences and safety
- Designed not to interrupt the daily operations
 - 30-45 minutes prior to daily construction start
- Can be customized to fit crew needs
- Training was delivered for 9 months to one construction crew which yielded positive qualitative results.
- During Phase IV the methods and materials will be tested quantitatively

Phase IV: Communication Test Improvement



Phase IV: Integration Training



Progression of the HWRP pedagogy



Phase IV: Integration Training

- Admits there are differences within and between cultures and opts to create a common subculture which works for all
- The process is driven through TICHA and the results by the supervisors and workers themselves



Conclusions

- Demographic info projects an increase in Iowa's Hispanic labor force
- TICHA training significantly increases interactions and communication on the jobsite
- Language conflicts are the most frequent
- Conflicts on the jobsite affect productivity
- Less communication conflicts will result higher productivity
- High demand for on-site and short training

Questions?

