



Exploring Retention and Sense of Belonging Among Hispanic Construction Workforces

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Hispanic workers make up approximately one-third of the U.S. construction workforce, a figure that is expected to increase, especially in the southern regions where reliance on Hispanic labor is growing due to workforce shortages. Despite their growing presence, limited research has been done focused on evaluating factors that improve workforce retention within this community. This study explores the relationship between employee retention and sense of belonging among Hispanic workers. A survey of Hispanic construction workers in Texas revealed a significant positive correlation (Spearman's coefficient of 0.69) between retention and sense of belonging. The study showed that employees in the early to Mid-Career stage have the lowest values for retention and sense of belonging, indicating the highest intention to remain with the organization and the strongest sense of belonging. The results also show a consistent level of retention and sense of belonging across career stages, with no significant differences observed between the different career stages. The present study highlights the importance of cultivating a work environment that promotes a sense of belonging among workers.

Keywords: Hispanic Workers, Sustainable Workforce, Employee Retention, Sense of Belonging, Work experience

Introduction

The construction industry is a critical component of the United States' economic growth, accounting for approximately 4% of the nation's Gross Domestic Product (GDP) in 2023, equivalent to approximately \$1.1 trillion (Trading Economics, 2023). Despite its economic impact, the industry faces significant challenges, particularly a continuing workforce shortage. A 2021 survey conducted by the Associated General Contractors of America indicated that 89% of construction firms encountered challenges in recruiting for some or all of their open positions (Associated General Contractors of America, 2021). To exacerbate this problem, the Bipartisan Infrastructure Law (BIL), passed in late 2021, brings more economical growth to the U.S. construction industry since this law provides funding to address critical infrastructure needs. As a result, several thousand more jobs are expected to be created in the construction industry in the coming years. However, the increase in employment opportunities will heighten demand, thereby exacerbating the existing workforce issue. Even if all unemployed individuals in the U.S. were employed in construction, their numbers would still fall short of meeting the industry's growing demand (Associated Builders and Contractors, 2024).

Minority workers, particularly Hispanics, represent a substantial segment of the blue-collar labor force in construction (Ohio Contractors Association, 2023). Hispanic workforce represents over 30% of the construction workforce. The dependence on Hispanic workers, has become essential for the construction industry's capacity to address this shortage. Their strong work ethic and the ability to carry out physically demanding tasks are significant advantages. However, they face unique challenges such as language barriers, limited access to safety training, and cultural isolation which affects their well-being, job satisfaction, retention rates, and overall contribution to the industry (Choi et al., 2022).

To ensure the long-term success of the construction industry, it is crucial to not only recruit Hispanic workers but also retain them. Failure to do so could potentially generate elevated turnover rates, increases in training expenses, and a loss of essential skilled labor, all of which negatively impact companies' timelines and budgets (Manesh et al., 2020). Despite the growing reliance on Hispanic workforce, there is a lack of research focusing on examining the critical factors affecting their retention, and sense of belonging within the construction sector. Understanding these aspects is essential not only for enhancing individual employee experience but also for ensuring the long-term industry's workforce sustainability. Specially, short-term strategies for addressing labor shortage fail to address the fundamental problems, such as a better understanding of what is impacting the stability and satisfaction of Hispanic workers (Escamilla, 2016).

Alongside ethnicity, career stage significantly influences retention and sense of belonging, adding further complexity to understanding worker experiences. Work experience is a key factor influencing both employee retention and their sense of belonging within an organization. Employees with more experience develop more realistic standards for job situations, are less likely to be emotionally disturbed by negative circumstances, which lowers their willingness to look for alternative jobs, and are more likely to have stable career paths. Additionally, employees with more experience are more likely to feel a part of their current jobs, which indicates a higher level of sense of belonging (Ng & Feldman, 2009).

This study aims to fill the gap in literature by exploring the relationship between key workforce sustainability factor such as sense of belonging and employee retention within the Hispanic workers community in the construction industry. To achieve this aim, this study focuses on evaluating the following among Hispanic workers:

- Evaluate the relationship between sense of belonging and retention.
- Assess the impact of career stage on retention and sense of belonging.

Literature Review

Workforce Sustainability

The construction industry's dynamic and cyclical nature leads to frequent employee turnover and a persistent shortage of skilled labor. Karakhan et al. (2023) emphasized the need for a systematic approach to workforce development by implementing sustainability strategies to reduce employee turnover and improve job satisfaction, focusing on attributes such as nurturing, diversity, equity, value, well-being, and connectivity, which aligns with (Sing et al., 2018)'s definition of construction workforce sustainability as the ability to retain, reinforce, and endure the demand for and supply of construction workers in the industry. Similarly, Jaitli & Hua (2013) found that organizations that support multilingual communication and offer culturally attuned training programs have elevated levels of belonging within their employees. These findings indicate that construction companies

seeking to establish a sustainable workforce should emphasize the development of an inclusive atmosphere that appreciates diversity and fosters a robust sense of belonging among all employees.

Adopting practices that encourage diversity, and inclusion is essential for building a sustainable workforce, especially given the increasing shift in workforce demographics. The number of Hispanic construction workers has grown significantly over the past two decades. For instance, in 2020, Hispanics accounted for 30.0% of construction workers, up from 20.3% in 2003 (U.S. Bureau of Labor Statistics., 2022). Despite their growing presence, Hispanic construction workers face unique challenges, including language barriers, cultural differences, and higher rates of occupational injuries compared to their non-Hispanic colleagues (Choi et al., 2022). Building a skilled and sustainable labor force depends on addressing factors that influence retention, such as fostering community and a sense of belonging, especially as the number of Hispanic workers in the construction industry continues to increase.

Workers' Sense of Belonging

Low retention rates in the construction industry have garnered significant attention due to their high costs and broad implications. These rates not only disrupt project continuity but also increase human resource management expenses, making retention one of the industry's biggest challenges (Varadharaj, & Irfan, 2019). Kulothungan (2020) highlighted several motivational factors influencing employee retention and their impact on both organizations and individuals. These factors ultimately affect an organization's ability to attract and retain talent. Kulothungan (2020) identified key variables such as financial incentives, job attributes, advancement opportunities, recognition, and work-life balance. The findings suggest that organizations must implement comprehensive retention strategies to effectively mitigate turnover rates. Additionally, Aponte Gonzalez (2016) identified strategies for retaining Hispanic workforce, emphasizing the importance of communication, collaboration, empathy, training, mentorship, compensation, financial incentives, and leadership approach. However, the role of essential factors that foster connectedness and acceptance—key components of a sense of belonging—on retention has not been adequately assessed.

Sense of belonging is a fundamental human need that has been connected to a range of behavioral, mental, physical, and social effects (Allen et al., 2021). Workplace belonging is defined as the feeling of being accepted, valued, and integrated within the work environment. Strong sense of belonging is significantly correlated with increased job satisfaction, enhanced productivity, and lower turnover rates among construction workers (Waller, 2020). While Sánchez et al. (2019) indicated that most Hispanic believe that establishing trust within their community is essential to cultivating a sense of belonging, research on the impact of sense of belonging on retention among Hispanic workers in the construction industry is limited.

Career stage and work experience significantly influence employees' sense of belonging and retention. According to Demerouti et al. (2012) employees in their early career often make critical decisions about their job, actively seeking jobs that align with their values and interest, enhance their social connections, provide diverse experiences, and show more willingness to change jobs compared to older employees with greater responsibilities. Greenhaus et al. (1987) reported similar findings indicating that experienced employees often secure jobs that better reflect their interests both personally and professionally, which increases job stability and improves retention and a sense of belonging. Their loyalty is often driven by trust in the company's ability to meet its commitments, further enhancing retention and belonging.

Research Methodology

The present study relied on quantitative approach to assess the relationship between retention and sense of belonging. First, a comprehensive literature review was conducted to explore factors affecting Hispanic employee retention, and the potential role of sense of belonging. Next, a survey was distributed to collect data from the Hispanic community to evaluate the posited relationships between retention and sense of belonging within the construction workforce. Statistical analysis was then performed to better understand and assess the relationship between these factors. The primary research steps are further explained in the following sections.

Survey

A questionnaire was developed to gather insights on the factors influencing employee retention, and sense of belonging among construction workers (See Table 1). The questions related to employee retention were developed based on previous studies by Gambatese et al. (2019) and Macdonald & MacIntyre (1997), while the question related to sense of belonging were based on studies from Hagerty & Patusky (1995) and Lu (2015). The survey employs a 5-point Likert scale to capture detailed information from participant's perspective. The scale is defined as follows: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. It includes questions on demographics (age, gender, ethnicity, marital status, education level, job titles, years of experience), and aid identifying significant factors affecting retention and sense of belonging, which are essential for understanding workforce sustainability. The survey was designed to be completed in approximately 15 minutes.

Table 1: Sample Survey Questionnaire

Categories	Questions	Sources
Employee Retention	<ul style="list-style-type: none"> I have considered leaving my job. I am actively looking for other jobs. I feel that I could leave my job. If I were completely free to choose, I would leave my job. 	Gambatese et al. (2019); Macdonald & MacIntyre (1997)
Sense of Belonging	<ul style="list-style-type: none"> I am just not sure if I fit in with my colleagues. I would describe myself as a misfit in most social situations. I would like to make a difference to people or things around me, but I do not feel that what I have to offer is valued. I do not feel that there is any place where I really fit in this organization. I am uncomfortable that my background and experiences are so different from those who are usually around me. I am not valued by or important to my boss. 	Hagerty & Patusky (1995); Lu (2015)

Participants

Targeted companies were identified through contacting contracting and subcontracting companies in Texas with a significant Hispanic population. Once company authorization was obtained, the researchers visited construction sites and communicated with the workers in both Spanish and

English. This ensured proper communication of the study's goal, participant's rights, and confidentiality policies. Pamphlets with a QR code to access the surveys were distributed to participants, offering both Spanish and English version of the surveys. Seventy-six participants successfully completed the survey.

Statistical Analysis

This study used multiple statistical methods to examine the relationship between employee retention and sense of belonging in the construction industry, and potential role of key demographic factors (age, gender, ethnicity, marital status, education level, job titles, years of experience). SPSS software was utilized for both descriptive and inferential statistical analyses to identify trends, correlations, and differences among demographic groups and the factors affecting both retention and belonging.

Cronbach's Alpha was used to measure the internal reliability of key constructs like employee retention and sense of belonging in the survey. Previous studies indicate that construct's reliability and validity is confirmed if the Cronbach's Alpha is equal to or greater than 0.7. The central tendency for both employee retention and sense of belonging was analyzed by calculating the average scores on a 5-point Likert scale. Employee retention was assessed using questions that measured attrition intention. Therefore, higher scores on the retention questions reflect a higher likelihood of the employee leaving jobs, indicating lower retention rates. While higher sense of belonging scores reflects a weak sense of belonging in the organization, suggesting that the employee feels disconnected from the organization and colleagues. The relationship between employee retention and sense of belonging was assessed using Spearman's correlation test, a non-parametric measure of association that is appropriate for the ordinal nature of the Likert scale data.

Subsequently, a detailed analysis was conducted to explore whether career stage has an impact on the observed relationship between employee retention and sense of belonging. Career stage was defined using the following (based on years of experience): Beginners (1-5 years), Early Mid-Career (6-10 years), Late Mid-Career (11-20 years), and Late career (over 20 years). The Kruskal-Wallis Test, which is a non-parametric alternative to ANOVA, was conducted to compare sense of belonging and retention across these experience-based groups.

Study Results

The results from the statistical analysis are presented in this section focusing on the correlation analyses conducted to explore the relationship between retention and sense of belonging across various experience groups.

Statistical Analysis

The study sample consisted of 76 construction workers from various specializations and career stages. The participants represented a diverse cross-section of the construction industry, primarily comprising Hispanic workers across different age groups and experience levels. The demographic and professional characteristics of the participants are detailed in table 2 below.

Characteristic	Categories	Frequency (%)
Ethnicity	Hispanic	94.7
Gender	Male	82.9
	Female	17.1
Age Group	18-30	6.6
	31-40	21.1
	41-50	44.7
	51-65	23.7
Marital Status	Married	72
	Not Married	25
	Prefer not to answer	3
Education	High School Diploma	52.6
	Associate degree	13.2
	Bachelor's Degree	5.3
	Others	28.9
Job Role	Carpenters (Drywall Installers, etc.)	81.6
	Foremen	7.8
	Equipment Operators	5.3
	Construction Managers	5.3
Stakeholder Group	General Contractors	57.9
	Subcontractors	38.2
	Others	3.9
Work Experience	Beginners (1–5 years)	24
	Early Mid-Career (6–10)	16
	Late Mid-Career (11–20)	24
	Late Career (20+ years)	36

The results showed Cronbach's alpha coefficient of 0.928 for employee retention, and 0.887 for sense of belonging, both exceeding 0.7 threshold. This indicates a high level of reliability, suggesting the survey consistently measures the same underlying concepts, and supporting the internal validity of the survey and the reliability of the information gathered.

Following the verification of the survey's reliability, the central tendency was assessed by computing the average scores for employee retention and sense of belonging. The survey results demonstrate a diverse response from the workforce. The average score calculated represents the composite measures of the multiple factors contributing to employee retention and sense of belonging. On a 5-point Likert scale, the average retention score was 2.468, suggesting a slight tendency towards the employee's intention to remain with the organization. However, the score shown was not far from neutral, suggesting that retention is not particularly strong either. The average sense of belonging scores was 2.88 on a 5-point scale, indicating that the employees have a neutral to slightly positive sense of belonging in the organization, reflecting the level of perceived connection and value within the organization.

Analysis of Retention and Sense of Belonging

The Spearman's correlation coefficient between sense of belonging and employee retention was $r(76) = 0.69, p = 0.001$, indicating a statistically significant moderate to strong positive correlation. This suggests that as employees' sense of belonging increases, their likelihood of staying with the organization consistently and meaningfully improves, as reflected in retention rates.

Role of Career Stage

Different career stages exhibit different patterns in retention and sense of belonging, as shown in Figure 1. Beginners demonstrate lower than average mean values in both retention and sense of belonging, indicating that employees in this career stage tend to feel more attached to the organization and are more likely to stay. Retention rates during the Early Mid-Career stage are the highest compared to other career stages, indicating a strong intention among employees to remain in their positions. However, the sense of belonging in this stage is comparable to that in the previous stage and remains below the overall average, suggesting there is room for improvement in fostering a greater sense of belonging among employees.

The black bars in Figure 1 represent the standard deviations for the mean values of retention and sense of belonging, highlighting the variability within each career stage. Both Late Mid-Career and Late Career employees have mean values higher than the overall average means for both retention and sense of belonging. These groups show the exact same mean value for sense of belonging and a minor difference in the retention means, this indicates that the employees in these stages have the highest intention of leaving their jobs and have the least sense of belonging towards the organization and colleges.

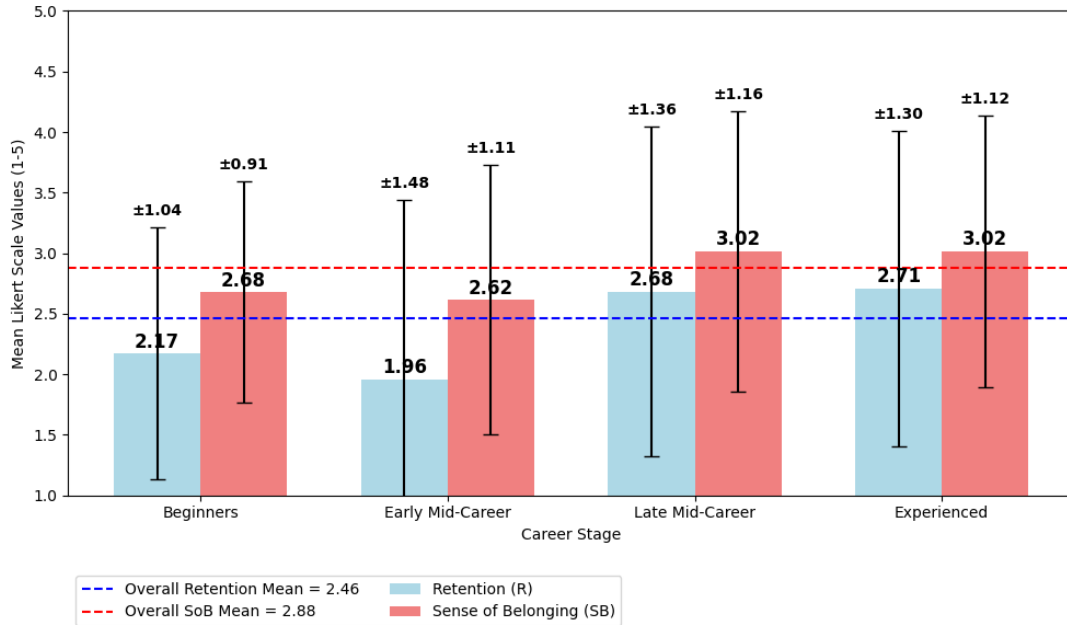


Figure 1: Retention and Sense of Belonging Means by Career Stage

Retention and Sense of Belonging Across Career Stages

Kruskal-Wallis tests were performed to assess variations in retention and sense of belonging across different career stages. The findings (See Table 3) reveal no statistically significant differences in retention or sense of belonging among the various career stages. These results suggest that the levels of retention and sense of belonging remain consistent within the organization, with no discernible differences observed between Beginners, Mid-Career, or Late career employees.

Table 3: Kruskal-Wallis's test

Comparison	Asymptotic Significance	
	Retention (P-value)	Sense of Belonging (P-value)
Beginners' vs Early Mid-Career	0.291	0.773
Beginners' vs Late Mid-Career	0.216	0.436
Beginners' vs Late career	0.196	0.252
Early Mid-Career vs Late Mid-Career	0.111	0.309
Early Mid-Career vs Late career	0.085	0.277
Late Mid-Career vs Late career	0.871	0.671

Conclusion

This study reveals a significant positive correlation between sense of belonging and employee retention among Hispanic construction workers, with $r_s(76) = 0.69, p = .001$. These findings underscore the importance of employees' sense of belonging in addressing workforce sustainability challenges in the construction industry. While employees in the Beginning and Early Mid-Career stages exhibited higher retention rates and stronger senses of belonging, the consistency across career stages suggests that fostering belonging should remain a priority throughout employees' careers.

The results align with previous studies, such as Joseph (2023), who reported a correlation coefficient of $r = 0.643, p < .001$ between sense of belonging and retention among 100 employees in the U.S. This comparison highlights that the relationship between belonging and retention observed in this study reflects a broader workplace phenomenon transcending both industry and ethnic boundaries. Additionally, research by Lin and Huang (2021) found that a vibrant learning culture during organizational changes improved job satisfaction and reduced turnover intentions, even in the face of unexpected challenges. Reducing the intention to quit not only increases retention but also lowers costs, boosts productivity, and encourages innovation (Al Balushi et al., 2022).

To enhance retention by fostering a sense of belonging, construction companies should consider several strategies: implementing bilingual communication programs, establishing mentorship programs pairing experienced Hispanic workers with newcomers, creating inclusive leadership development opportunities for Hispanic workers, offering cultural competency training for management, and fostering a collaborative work environment through team-building activities and cross-cultural events. Research by Hee and Ling (2011) highlights that fostering a sense of belonging reduces job stress and increases job satisfaction, thereby improving retention rates. Shared spaces promote community and collaboration, while clear career paths, regular feedback, and fair compensation demonstrate to employees that they are valued and have a future within the organization.

These recommendations are particularly crucial given the construction industry's growing reliance on Hispanic workers and the persistent workforce shortages highlighted in this study. Companies that effectively implement these strategies are likely to see improved retention rates, reduced training costs, and stronger workforce sustainability.

While this study focuses on Hispanic workforce sustainability in Texas, future research should conduct comparative analyses between Hispanic and non-Hispanic workers and cross-industry comparisons to better understand unique aspects of belonging and retention within the Hispanic construction workforce. Additionally, investigating the effectiveness of specific belonging-enhancement programs and their impact on long-term retention would provide valuable insights for industry practitioners, contributing to more comprehensive strategies for building an inclusive, sustainable construction workforce that meets the industry's growing demands.

A key limitation of this study is that it did not examine all factors affecting retention. For example, no data was collected on the impact of salary and promotion opportunities, preventing a comparison of their influence relative to sense of belonging. Future research should explore these variables to provide a more complete understanding of workforce sustainability in the construction industry. Additionally, examining how salary levels interact with retention and sense of belonging and identifying specific organizational practices to enhance belonging would offer valuable guidance for improving workforce sustainability in the construction sector.

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