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Work and Occupations 2011 38: 149

DOI: 10.1177/0730888410397918

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Work and Occupations
38(2) 149–178
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DOI: 10.1177/0730888410397918
<http://wox.sagepub.com>



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Abstract

Studies of immigrant labor market incorporation in the unregulated sector of the U.S. economy either assume that immigrant workers are trapped in low-wage jobs because of low human capital, or paint a picture of blocked mobility because of exploitation and discrimination. In this article, we offer a third sociological alternative to understand processes of occupational mobility and skill learning. Drawing on work histories of 111 immigrant construction workers, we find that many immigrants are skilled; having come to their jobs with technical skill sets acquired in their home communities and their previous U.S. jobs. We further find that these less-educated immigrants, who rank low on traditional human capital attributes but high on work experience may circumvent exploitation and build mobility pathways through skill transference, on-the-job reskilling, and *brincando* (job jumping).

Keywords

immigrant labor markets, economic mobility, human capital, job jumping/hopping, skills transferences, reskilling

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In Guerrero, Mexico, Marco worked as an *ayudante*¹ (a helper/apprentice) in construction, making US\$3 a day. Through close observation and under the direction of an *albañil* (skilled mason), he learned a variety of on-the-job skills, from brick making to plastering to tile installation. When Marco joined his uncle and aunt in Durham in 1990, he had found a job easily as the economy was booming and the labor market was tight. He was hired as an *ayudante* to a subcontractor, but this time he was earning the going rate—US\$8 an hr. Initially, his tasks were limited to maintaining the construction site and helping coworkers and crew leaders with their jobs. Over time, however, he was given the opportunity to demonstrate the tile installation skills he had learned on his job in Mexico and his wages increased to US\$10 an hr. Migration to North Carolina and working in the area's construction industry also allowed Marco opportunities to reskill, as he acquired new on-the-job skills, including framing and ceiling work. By 1993, only 3 years after arriving in the United States, he had changed firms, which in turn provided him with an opportunity to work his way up to title of *maestro de obra* (skilled crew leader of a team). Today, Marco is an *encargado* (supervisor, lead man) of a multimillion-dollar condominium project in Charlotte, North Carolina.

Marco is one of many Latinos who have benefited from the restructuring of the U.S. construction and building trades over the past 30 years and especially during the industry's economic boom before it fell victim to the nation's recession in 2008. From the mid-1980s through 2007, Latino workers gained significantly from the industry's expansion, landing more than two out of every three new jobs by the mid-2000s.² In these jobs, they saw their wages increase substantially, moving to the middle range of the nation's wage distribution (Pew Hispanic Center, 2007). Moreover, Latino wage gains and occupational advances during this 20-year period occurred despite low levels of education and a lack of English language skills (Chavez, Mouw, & Hagan, 2008), traditional human capital attributes that are regularly associated with immigrant upward economic mobility (Chiswick & Miller, 1995, 1998; McManus, 1985; McManus, Gould, & Welch, 1983).

Although we know from Census and survey data that Latinos, including many authorized and unauthorized immigrants, have fared well in the U.S. construction and building trades in recent decades, with few exceptions (Lowe, Hagan, & Iskander, 2010; Milkman 2001; Valenzuela 2001, 2006; Waldinger & Bailey, 1991), we know little about the social processes that facilitated their wage gains in this industry. The story of economic mobility in the construction industry is one that focuses almost exclusively on native-born Americans. Construction is a craft industry through which formal training programs have long provided economic mobility and career advancement

opportunities to native-born workers who entered their jobs possessing little or no formal education (Applebaum, 1999; Moccio, 2009; Paap, 2006; Palladino, 2005; Riemer, 1979; Silver, 1986). For the most part, however, Latino immigrants are excluded from these formal apprenticeships and related training and wage-setting programs (Bates, 2008; Milkman & Wong, 2000; Waldinger & Bailey, 1991).

By and large, studies of immigrant labor market incorporation in the construction industry and other unregulated informal jobs either assume that immigrant workers are unskilled by virtue of the transfer of low levels of traditional human capital and thus trapped in low-wage jobs (Borjas, 1995; Chiswick & Miller, 1995), or they paint a bleak picture of economic marginalization, exploitation, and discrimination because of the conditions of an unregulated industry and the undocumented status of its heavily immigrant workforce (Castles & Portes, 1989; Cornfield, 2009; Gallegos Lerma, 2011; Sarmiento, 2002; Theodore, Valenzuela, & Melendez, 2006). Other than legal redress or unionization (Cornfield, 2009; Fine, Grabelsky, & Narro, 2008; Milkman, 2006; Milkman & Wong, 2000), there is very little discussion in the literature of the ways in which immigrants working in these unregulated jobs respond to and resist discrimination and attempt to circumvent blocked mobility. Indeed, most scholars emphasize entrepreneurship as the only viable mobility strategy for immigrant workers in unregulated sectors of the economy (Valenzuela, 2001; Pisani & Yoskowitz, 2006; Ramírez & Hondagneu-Sotelo, 2009), largely overlooking the alternative mobility pathways created by immigrant workers themselves to increase wages within existing jobs and advance occupational careers within the industry.

In this article, we offer a sociological alternative to understand processes of skill-acquisition learning and economic mobility within the immigrant workforce. Drawing on detailed cross-border work histories of largely undocumented migrant construction workers in the urban Research Triangle Area of North Carolina, we find that many migrants working in the construction industry are quite skilled, having come to their North Carolina jobs with technical skill sets acquired on-the-job either in their home communities or in their previous U.S. jobs. We further find that these less-educated immigrants, who rank low on traditional human capital attributes but high on work experience and informal learning, are sometimes, through their own agency, able to circumvent exploitation and build pathways to economic mobility. In this article, we document three mobility strategies involving skill transference, on-the-job reskilling, and individual agency practices, the most important of which is *brincando* (job jumping or job hopping). *Brincando*, as immigrant workers refer to it, is a strategy developed to escape bad jobs or those with

limited advancement opportunities and to demonstrate newly acquired skills to prospective employers, ultimately improving work conditions and augmenting wages.

Our study has implications for existing models of immigrant labor market incorporation. The research points to the limitations of traditional human capital models that rely solely on easily visible and measurable individual skills to explain immigrant labor market outcomes, including wages, while largely ignoring harder-to-measure aspects of work experience, especially nonformal on-the-job learning. Similarly, our research points to the limits of collectivist and sociopolitical models of immigrant mobility that, in the absence of legal redress, offer a biased narrative of bleak working conditions and blocked mobility. We find that international migration is more than a strategy to just secure higher wages; it is also a strategy through which many migrants with low levels of education and few occupational credentials actively transfer and acquire skills that facilitate alternative pathways to economic mobility. Moreover, we argue that the learning of skills is a social process that is embedded in social relations and labor markets on both sides of the migratory stream.

Our research also has policy implications. We argue that we need to rethink human capital measures, especially as they inform and shape U.S. immigration policy. Currently, immigration policies explicitly give preference to professional immigrants who rank high on traditional human capital attributes, narrowly defined as credentials and formal education. In contrast, it restricts the entry of “unskilled” migrants, thereby denying the knowledge and skills they bring with them to U.S. labor markets (Reich, 1991; Williams, 2007).

Our article is organized into three sections. We first turn to relevant literature on skills and immigrant labor market incorporation. In the second section, we introduce the research site and study sample. We then draw on findings from interviews with 111 immigrant workers and 20 employers and industry experts to show how immigrants with low levels of traditional human capital generate routes to upward mobility through skill transference, on-the-job reskilling, and job jumping.

Relevant Literature

Immigration scholars have long recognized the link between human capital and the economic mobility of immigrants. On their arrival in a destination country, immigrants generally command lower wages than native born because the human capital obtained abroad is undervalued in places of destination. However, through the acquisition of country-specific human capital,

including education and language proficiency, immigrants have been able to increase their relative bargaining power with their employers, securing higher wages, better benefits, and improved working conditions in the process (Chiswick, 1986, 2000; Dustman & Fabbri, 2003; Duvander 2001; Friedberg, 2007; Smith & Edmonston, 1997). But equally, when jobs fail to generate expected financial rewards or employees face discrimination, well-educated and professional immigrants have also been known to harness their skill sets to seek out and secure better alternatives, either higher-paying jobs or more rewarding entrepreneurial opportunities (Saxenian, 1996; Shih, 2007).

Yet immigration scholarship that connects human capital and labor market mobility remains underdeveloped and incomplete because it only captures the experiences of one set of immigrant workers—namely those with high levels of formal education and strong country-specific language skills (Williams, 2007). Broadly speaking, this reflects a general bias in the human capital literature that assigns immigrant workers into one of two broad categories: skilled and unskilled. This distinction is based on an economic model of human capital theory, which considers labor migration as an investment decision in which returns are balanced against costs (Sjastaad, 1962). Typically, quantitative methods are employed to measure the relationships among individual attributes and the mobility gains achieved through migration. Although the theory acknowledges other potential influences on economic mobility beyond education, such as work history, data requirements compel most researchers to rely exclusively on observed levels of education as proxies for human capital. The most commonly used model relies on human capital attributes to predict and explain immigrant jobs and earnings in places of destination. The basic argument is a temporal one: increased time spent in the destination country is related to acquisition of country-specific skills, especially education and language skills, that are positively correlated to income (Dustman, Fabbri, Preston, & Wadsworth, 2003; Duvander, 2001).

Studies conducted in U.S. labor markets by economists have found that immigrants ranking high on these country-specific skill sets experience wage and occupational gains (Borjas, 1995; Smith & Edmonston, 1997). This group of immigrants is typically referred to as “skilled.” In contrast, immigrants who rank low on these human capital attributes, especially low levels of education, are relegated to jobs that provide limited or blocked mobility (Chiswick & Miller, 1995, 1998, 2007; Cobb-Clark & Kossoudji, 2000; Dustman & Fabbri, 2003; McManus, 1985). This group is typically referred to in the literature as “unskilled” (Borjas, 1995). Most Mexican and Central American immigrants in the United States, like Marco who is featured in the

introductory narrative to this article, fall into the socially constructed status of “unskilled” by virtue of their low levels of education and limited English language skills, without regard to their actual labor market history in places of origin and transfer of skill to places of destination as there have been very few attempts to measure the latter. An exception is the Monterrey–Houston study by Rubén Hernández-León (2004), who found that immigrant machinists working in Houston’s petrochemical industry had acquired their skills in industrial jobs in Monterrey, Mexico and used them to leverage better wages and better jobs.

Sociologists of immigration have challenged the assumption of the unskilled immigrant by demonstrating the importance of social networks and ethnic niches as centers of nonformal learning and skill development. Social networks can include personal and informal social and employment networks (Hagan, 1998; Ramírez & Hondagneu-Sotelo, 2009; Waldinger & Lichter, 2003), as well as more formal immigrant advocacy and community-based supports (Milkman, 2000, 2006; Waldinger et al., 1996). Similarly, historical and contemporary studies of immigrant groups in the United States have long emphasized the importance of ethnic niches in which newcomers can escape exploitation in the primary labor market and find employment and learn new skills while working alongside coethnics (Bonacich & Light, 1998; Glazer & Moynihan, 1963; Wilson & Portes, 1980; Waldinger & Lichter, 2003; Valdez, 2008). In this way, ethnic niches serve as on-the-job training systems that reduce the costs of skills development for workers and employers (Bailey & Waldinger, 1991). Research has also shown that on-the-job learning has implications for immigrant labor market careers in the long run. The human capital that recent immigrants acquire on-the-job, including place-specific human capital such as language skills and work experience, along with interpersonal social skills and technical know-how, can serve as the basis for finding new jobs that offer higher wages and better advancement opportunities outside the ethnic economy (Chavez et al., 2008; Lowe et al., 2010; Ramírez & Hondagneu-Sotelo, 2009).

From the perspective of human capital, these studies point to variations in skill development for immigrants. New skills are often developed informally and on-the-job and may include the transfer of interpersonal knowledge, tacit skill, and technical know-how that cannot be easily expressed or measured in explicit terms (Polanyi, 1966), a learning process especially characteristic of construction work (Iskander, Lowe, & Riordan, 2010). This stands in contrast to the traditional metrics of human capital skills that are institutionally shaped, recognized by the employer, and easily measurable. Skills learned on-the-job are acquired through interaction and observation and they include

task-specific technical skills, social/interpersonal skills, managerial/entrepreneurial skills, and cultural skills, such as learning new practices or comparing practices. Though recognized in discussions of learning and skills development in the social science literatures more generally (Evans, Hodkinson, & Unwin, 2002; Spenner, 2010), on-the-job or workplace learning is an important but rarely measured source of knowledge in the immigration and labor market literature (some exceptions include Lowe et al., 2010; Waldinger & Lichter, 2003). Rather, economists rely on proxies such as education and years of work experience, at the cost of understanding the actual processes of learning and skill use. Although there have been recent attempts to incorporate occupation and work experience at origin into human capital models (Akresh, 2006; Kanas, Van Tubergen, & van der Lippe, 2009), these analyses provide incomplete understanding of skill acquisition and transferability as skill is equated to the status of occupation, which may or may not reflect one's total human capital. Unlike the acquisition of traditional human capital skills, including credentials and formal education, on-the-job learning is more interactive and involves substantial observation. As such, on-the-job learning is as much a process of individual knowledge as a social process of learning through face-to-face interaction and exchanges of knowledge (Gertler, 2004). It is easy to see how these social processes related to on-the-job learning are especially important to understanding skill development and labor market adjustments for immigrants employed in work that has few formal educational requirements, or work associated with crafts, such as construction and landscaping, that depend on learning by doing rather than formal education (Iskander & Lowe, 2010; Light, 1972; Lowe et al., 2010; Pisani & Yoskowitz, 2005; Ramírez & Hondagneu-Sotelo, 2009; Valenzuela, 2001).

Although there have been attempts to rethink human capital theory by broadening how we conceptualize and measure skills and learning among immigrants with low levels of education, none consider work experience and the nonformal skills learned and acquired on-the-job *in places of origin* and then brought to the United States. In this article, we argue that understanding the relationship between skills and immigrant labor market adjustments in the United States requires knowledge of work histories in both places of origin and destination. Turning to the case of Latino immigrants in the North Carolina construction industry, we find that pathways to economic mobility in the U.S. labor market began in their home communities, where they often acquired construction-related work experience and developed substantial skill sets on-the-job. Once in their U.S. jobs, migrants experience substantial reskilling through observation and learning from coworkers and supervisors,

many of whom are coethnics. The role of on-the-job skills learned in places of origin and destination is fundamental to understanding the mobility pathways of immigrants with low levels of education. It is the ability to transfer skills from their places of origin and acquire new ones in their destinations that empower immigrants with low levels of traditional human capital to take the risk and *brincar* (job jump) to demonstrate newly acquired skills and successfully augment wages.

Recognized as a successful strategy used by both native-born and immigrant professionals to circumvent discrimination and secure higher wages (Saxenian, 1996; Shih, 2006), the concept of job jumping or job hopping has not really been explored in the literature on labor market incorporation of less educated and unauthorized immigrants. In the literature, it is argued that for immigrants in these categories, changing jobs within the informal or ethnic sectors of the economy rarely improves working conditions and wages (Castells & Portes, 1989; Orrenius & Zavodny, 2004; Theodore, Valenzuela, & Melendez, 2006; Valenzuela & Melendez, 2003; Zaman, Diocson, & Scott, 2007) and may unintentionally reproduce conditions of inequality and isolation (Light, 2006; Sassen, 1989; Zolniski, 1994). The problems with these arguments, however, are that they either assume that immigrants with low levels of education and precarious legal status are trapped in spatially confined labor markets such as street corners, or that immigrants' work experience is firm specific and that workers cannot transfer skills from one job to another job.

Our study of immigrant workers in the construction industry challenges these assumptions. We find that labor markets operate on both ends of the migratory stream and the skills acquired in origin and destination allow immigrants with more experience and skill to use *brincando* as the basis for labor market movement and specifically for moving out of exploitive and less satisfactory jobs. To improve their lot, immigrants jump across multiple employers, from crew leaders to subcontractors to firm owners, and across ethnic economies. The practice also crosses informal and formal labor markets and intersects different industries, including construction and landscaping. Although certainly encouraged by pioneering, growing, or tight labor markets, the strategy of *brincando* depends not on the possession of high levels of education and formal credentials but primarily on the acquisition of skills in places of origin and destination and on individuals' confidence to take risks and job jump to escape bad working conditions and market their skills to locate better jobs. As immigrants, especially those without documents, they have already taken a huge risk through their migratory experience. In that context, the risk of *brincando* in local labor markets is relatively minor. After all, in many respects, migration itself is the ultimate form of *brincando*.

Research Site, and Study Design and Sample

Research Site

In this article, we focus on the Latino immigrant labor market experience in the construction and buildings trades in the Research Triangle area of North Carolina. A new immigrant gateway, the composition of North Carolina's population has changed dramatically in recent decades. Like many other states in the South with little history of international migration, North Carolina has experienced a dramatic growth of its Latino population. Before the late 1980s and early 1990s, Mexican immigration was largely restricted to the southwest region of the United States. Since then the geography of Mexican immigration has shifted dramatically and is now dispersed throughout the nation (Durand, Massey, & Capoferro, 2005). A major recipient of this new Mexican immigration is North Carolina. Between 1990 and 2000, the Latino population of North Carolina grew by 394%, numbering 378,963 by the end of the decade. From 2000 to 2008, the Latino population almost doubled, reaching 694,185 and comprising 7.4% of the state's population (U.S. Census Bureau, 2001, 2006, 2009). Roughly half of this growth can be attributed to immigration from Mexico and Central America, but the state also drew established Latinos from traditional gateway cities such as Houston, Los Angeles, and Chicago (Massey, 2008; Zúñiga & Hernández-León, 2005). Our study of immigrant labor market incorporation in the construction industry takes place in the three-city urban area of North Carolina that encompasses Chapel Hill/Carrboro, Durham, and Raleigh, home to more than 65,000 Latinos, the majority of which are Mexican born (U.S. Census Bureau, 2006, 2008).

The factors explaining the increased immigration to the southeast, to North Carolina and to the state's construction industry are complex. Major changes in the global economy have created new forms of both deindustrialization and economic investment in the U.S. South (Ansley & Shefner, 2009; Mohl, 2005; Portes, 2009; Walden, 2008). Free-trade policies such as the North American Free Trade Agreement (NAFTA) and the Central American Free Trade Agreement (CAFTA) have spurred capital and immigrant labor to the region. Economic restructuring has undermined old forms of production in the South, such as steel, textiles, and apparel, and new sources of economic investment have flowed into the region as domestic and foreign capital search for cheap labor, new markets, and government incentives (Mohl, 2003; Walden, 2008). By 2000, the regional economy in the U.S. South was increasingly diverse but with a segmented labor force, featuring high tech research alongside low-wage manufacturing, agriculture, and service sectors. Indeed, at a time when manufacturing has been losing ground in the rest of the nation, new food-processing meatpacking and poultry plants have been

springing up all over the South, but especially concentrated in the low-wage, anti-union states, including North Carolina (Ansley & Shefner, 2009; Griffith, 2006; Mohl, 2003; Parrado & Kandel, 2008; Walden, 2008).

One industry in the south that has experienced tremendous growth in recent decades and become increasingly dependent on immigrant labor is the urban construction industry (Dever, 2009; Kasarda & Johnson, 2006; Pew Hispanic Center, 2007). In the absence of union influence in the south, corporations and subcontractors have managed to lower wages to such a point that construction has become increasingly unattractive to native-born workers (Erllich & Grabelsky, 2005; Portes, Castells, & Benton, 1989). In North Carolina, the construction sector is currently the largest employer of Latino immigrants; 30% of the state's construction workforce is Latino (Kasarda & Johnson, 2006), with estimates reaching as high as 70% in some urban areas (Craver, 2006). Working primarily as roofers, bricklayers, general laborers, carpenters, and framers on residential and commercial projects, Latinos can earn fairly high wages by North Carolina standards, ranging from US\$9 to US\$22 per hr (U.S. Bureau of Labor Statistics, 2009). The high end of this wage scale, coupled with the opportunity to apply old skills and learn new ones, makes construction work especially attractive to immigrants who otherwise might have to work in less rewarding jobs in other immigrant heavy industries, such as agricultural and hospitality-related industries (e.g., restaurants work and housekeeping).

Research Design and Sample

To understand skill transferability and immigrant labor market experiences in the construction industry, we rely on in-depth interviews conducted with three sets of actors: Latino immigrant construction workers; their supervisors and employers', and institutional and community actors, including key representatives from construction industry associations and building trades unions, training centers, and immigrant advocacy organizations. To examine skill formation and transferability at the worksite, we also conducted observations at several residential and commercial construction projects.

We conducted open-ended interviews with 111 male Latino immigrants working in residential and commercial construction from 2007 to 2010. The interviews lasted approximately 1 hr each and all were conducted in Spanish. Most interviews were recorded, however, in some instances immigrants requested that we only take notes. We accessed immigrant workers through a variety of channels, connecting with some in public places, such as parks, flea markets, day labor sites, laundromats, restaurants, and food stands. From

these initial contacts we relied on snowball sampling, a commonly used strategy for locating hard-to-find or sensitive populations, like undocumented migrants (Chavez, 1992; Hagan, 1998; Hondagneu-Sotelo, 1994). Approximately half of the interviews were conducted with immigrants identified and approached through their construction workplaces. The interviews focused on migration history, work history in places of origin and destination, and on-the-job learning and skill development. Each interview was transcribed or summarized in detail and then coded into themes for analysis by the authors.

We also collected basic demographic data on each respondent to provide a profile of the sample. The large majority (82%) of immigrants in the sample hailed from the Mexican states of Guerrero, Distrito Federal, Veracruz, Guanajuato, and Chiapas. The remaining 18% were from Central America, primarily from urban areas in Honduras and the highland region of Guatemala. Some came from small ranchos, but like many more recent Latin American immigrants to the United States, many came from urban areas (Hernández-León, 2008), including Mexico City, León, Tegucigalpa, Guatemala City, and Veracruz. The majority of them arrived after 2000 (56%); some were more recent arrivals, whereas others had established labor market experience in the United States. Coming from urban and rural labor markets, many of these men possessed varied skill sets and workplace experiences. In Mexico, the respondents worked primarily in the construction and agricultural industries (90%), though small numbers also worked in manufacturing and personal service jobs. A total of 57% of the population migrated directly to North Carolina from Mexico and Central America; the remaining 43% had lived and worked in another U.S. state before migrating to North Carolina. In their prior U.S. residences, they furthered their labor market skill sets, working primarily in agriculture, landscaping, construction, and service jobs. Their U.S. construction jobs were varied, multiple, and fluid, making it very difficult to classify the sample into neat and fixed occupational categories. Some identified themselves as *ayudantes* (helpers); others as *albañiles* (skilled masons); others as roofers, bricklayers, painters, electricians, *chirroqueros* (sheetrock workers), and framers. Some of the men were entrepreneurs, but also worked for pay for another employer. A number of the men worked for one employer, but performed side jobs in the informal economy on the weekend. Many of the workers we interviewed had relatively stable employment, staying with a housing or commercial project for several months. Some managed to follow their employers to various projects in the region, sometimes taking them to other U.S. states in the Southeast. A few shifted between the informal and formal sectors of the industry, working temporarily for one employer for several weeks or months on a project and then returning to a day labor site

and working as *jornaleros* (day laborers) until they found another more permanent job with some stability.

Even with considerable work experience in Mexico, Central America, and the United States, the sample possessed relatively low levels of traditional human capital. Like most Mexican and Central American immigrant workers in the United States, these immigrants had relatively low levels of education. Close to half (44%) of those who responded to the question on education (67) had completed nine or fewer years of education. Another 56% had some secondary education, but had not earned degrees. Eleven of the workers were long-term settlers and had invested in country-specific human capital, having received some secondary or postsecondary education in the United States, including GED certification and vocational training. In general, the men's English language skills were minimal. With the exception of the 11 workers who attended some school in the United States and several crew leaders who attended employer supported technical training at a local community college, the men reported speaking no or very little English. Although we did not directly ask about the legal status of the respondents, in conversations about their migration, the large majority volunteered that they entered the United States without authorization.

We complemented the immigrant interviews with 20 interviews with employers of immigrant workers, with construction industry experts, and with long-term native-born construction workers. Roughly half of the employer interviews were conducted at construction sites where we also conducted observations. From employers we requested information about recruitment, skill transferability and development, and changing industry techniques resulting from immigration. Furthermore, interviews with institutional actors allowed us to determine the degree to which immigrant workers are included or excluded from formal training and programs designed initially for the native-born workforce.

Finally, in spring and summer of 2009, the senior author traveled to Mexico to lay the foundation for a project on return migration. During this period, Hagan and her colleague, Sergio Chavez, interviewed a hierarchy of return migrants and nonmigrant workers in construction-related occupations to better understand and compare work practices and skill-development processes and industry practices in Mexico and the United States.³ Even though this is the story of immigrant labor market incorporation in the United States, when useful we interject findings from these interviews into the narrative for comparative and contextual purposes.

Skill Formation Processes and Pathways to Economic Mobility

Despite their low levels of traditional human capital, a substantial number of the immigrant workers in the sample reported wage gains and occupational mobility in their construction careers in the United States. A total of 60% of the sample reported a wage increase, whereas 40% reported no increase. In addition, 50% of the sample reported some form of occupational advancement, often from a general laborer (*ayudante*) to bricklayer or framer or team supervisor. Close to half (47%) credited their economic gains to successful job jumping. To understand why some gained while others did not, we need to look at where and how the immigrants developed their skill sets and then used them to navigate pathways to mobility through *brincando*, or job jumping.

Yo Traje la Técnica: Brincando With Skills From Origin

Pathways to economic mobility in the U.S. labor market began in immigrants' home communities, where they often acquired construction work experience and developed a variety of on-the-job skills from coworkers and *maestro albañiles* (master masons with multiple skills). As a number of immigrants told us when we asked where they acquired their skills, "*yo traje la técnica*" (I brought the method with me). Indeed, some of the men knew that they would have the opportunity to transfer their skills, as family and friends with job contacts had recruited them from Mexico because of their work experience in the industry. Close to half of the sample worked for pay in construction jobs in Mexico. Some had worked on commercial projects in cities, others on housing construction sites in small towns. Others acquired their construction-related skills on informal family and community jobs, such as assisting in the construction of a family house or volunteering on the construction of a community road or church. Not captured in surveys, this informal learning points to the importance of taking into account the social context in which learning and knowledge sharing take place, an especially important consideration in the study of skill acquisition among working-class persons who generally cannot afford the luxury of hiring someone to build their own homes.

The most common skills that immigrants brought from places of origin to their U.S. construction jobs were bricklaying and masonry, tile making and installation, and carpentry—skill sets that U.S. employers of immigrant workers readily identify as Mexican craft specialties. In many Latin American

countries, but especially in Mexico, these skills are integrated and associated with the occupation of *albañil* (skilled mason). An *albañil* is one of the most prestigious occupations in Mexico that does not require formal training. Moving up the occupational ladder to a *maestro albañil* is a hard climb because in Mexico the occupation is very stratified and on-the-job learning is dependent on one's immediate supervisor. The entry-level laborer is a *chalán*, who works for and is trained by the *ayudante* (helper), who works for and is taught skills by the *media cuchara* (a half-filled spoon or person with medium skill), who is the direct assistant of the *maestro albañil*. *Maestros albañiles* possess multiple skill sets and are versed in all phases of adobe, tile, ceramic, and brick production and installation. In Mexico, the *albañil* is a craftsman who knows how to mix the adobe and brick materials (ranging from mud and straw and sticks to cement), mold the bricks, and lay the bricks, all without any technological device or tool. Furthermore, the skills of most *albañiles* extend beyond brick production and are integrated into other skill sets. *Albañiles* usually have experience with the construction of adobe and stone structures and the installation of stone and tile flooring and countertops. As one immigrant *albañil* put it, "*En Mexico, hacemos de todo*" (We do it all).

Some craftsmen were able to successfully transfer their skills as *albañiles* across borders and use this strategy to job jump across employers. Take the case of Juan, who migrated to the United States in 2005. Since his arrival he has worked in several construction-related jobs, including landscaping and installing telephone and cable wires. But Juan wanted to work in his trade and demonstrate his integrated skills as an *albañil*. He decided to take a risk and job jump. Through the help of a coethnic intermediary, Juan applied for a masonry job with a construction firm in Raleigh. Working through a bilingual intermediary, the employer asked him about his skill and he was given the opportunity to explain his construction experience in Mexico and demonstrate his bricklaying skills. He also told his prospective employer that he could work with ceramics and tile. His ability to transfer his integrated skill sets was dependent on his employer recognizing and valuing these skills. Today Juan's work responsibilities are multiple, including painting, cement mixing, bricklaying, and installing tile and ceramics. In fact, Juan relayed that roughly 70% of the skills he learned in Mexico he was able to transfer to his current job in the United States. In this job he has also learned measurement techniques and how to work with brick-cutting and tile-cutting machines. Despite the fact that he would most probably be classified by the U.S. Census as a construction laborer because of his low levels of human capital, or at best a bricklayer, or crew leader by his employer, Juan identifies his occupation as one of the most prestigious craft occupations in Mexico—an *albañil*.

Other immigrants who arrived with a repertoire of integrated *albañil* skills were only able to transfer some of their skills to their new jobs in the United States, suggesting a simultaneous deskilling process. Deskilling was more pronounced in some types of construction skills than others, but it appeared to be most evident among workers with bricklaying experience, who reported that their craft is far more fragmented in the U.S. construction industry. Essentially, as mentioned above, the Mexican bricklayer or *albañil* knows how to make bricks and is trained to work with all materials apart from steel, wood, and glass. In the United States, because of advanced technology in brick production and the specialized nature of construction tasks, they often only have to lay the bricks. So, some of the workers, with a history of *albañil* work, became basic bricklayers. At the same time, although the transition from a pre- to a postindustrial economy might sometimes involve an imperfect transfer of skills for the *albañil*, the work can be less strenuous, more pleasurable, and more creative in the United States, depending on the worker's position in the occupation and his skill level. Some migrants commented on the creativity associated with laying wood floors and ceramic tiles. Jose, a return migrant who worked as a *chalán*, in Mexico and then *ayudante* in the United States, described the travails of brick making and brick laying in Mexico as compared to the United States.

In Mexico, the bricks are molded from clay, dried in the hot sun, baked in a large outdoor brick oven. The work is hard, especially under the hot sun. Once the bricks are made, the work continues to be hard. As a *chalán*, often we must carry the bricks in cloth wraps that are strapped to our backs and foreheads to the construction site. In the United States, the bricks are made by machines, brought directly to the construction site, and loaded next to construction site with machinery. All we need to do is place the bricks.⁴

Laboring in jobs with limited mobility opportunities and experiencing discrimination and exploitation, workers used their existing skills sets acquired in places of origin to leave bad jobs and locate better ones. Take the case of Alejandro, who at the age of 17 migrated from Mexico City to North Carolina in 1999. In Mexico, he worked for his father who was a builder of modest concrete residential homes in a government housing project. From his father, he learned how to mold and lay brick, install tile, and install door and window frames.

Armed with these skills, Alejandro had no problem locating a construction job in the residential sector of the North Carolina's then booming construction

industry. Through a personal network, he landed a job as an *ayudante* to a Mexican subcontractor. His starting wage was the going rate for an *ayudante* without documentation—US\$8 an hr. Initially, his tasks were limited to maintaining the construction site and helping coworkers and crew leaders with their jobs. Over time, however, he was given the opportunity to demonstrate the tile-installation skills he had learned on his job in Mexico and his wages increased to US\$10.50 an hr. He also learned to paint with a spraying machine, hang sheet rock, and sharpened his tile installation skills with the use of new technology. Initially, Alejandro was satisfied with his job. His wages were good and he was able to use his trade. Over the next 6 years, however, mobility opportunities waned and he faced discriminatory work practices.

First, he hit a ceiling with regards to his wages. Additionally, because the subcontractor worked in the informal sector of the industry and was paid under the table, Alejandro had no benefits or job security. Nor did he have the opportunity to file taxes, something he wanted to do because his long-term plans were to settle permanently in the United States. He reasoned that if a legalization program was implemented for undocumented migrants, filing taxes would provide a paper trail and documentation to allow him to regularize his status.

To improve his economic situation, Alejandro decided to take the risk and jump jobs. Through contacts provided by coworkers, he applied in person and on site for a job with an American-owned home-remodeling firm. *Brincando* paid off for Alejandro. He was hired at a starting wage of US\$15 an hr. Because his employer “noticed my quality of work,” he was promoted to crew leader and earning US\$20 an hr. Today, 3 years later, Alejandro is earning US\$25 an hr. Occasionally, he also works as an independent contractor for his current boss, which allows him to hire his own crew and bid for a job. Alejandro believes his experience in the United States has been a success. He built and owns a home in a suburb of Chapel Hill, and his long-term goal is to start his own remodeling company. Alejandro credits much of his success to the skills he brought with him from Mexico and his ability to demonstrate these to his U.S. employers.

Employers also value the breadth of social and technical skills that immigrants bring with them to the U.S. labor market and the contributions they make to the construction industry. Some employers went so far as to report that immigrant workers are more skilled than their native-born counterparts because of their adaptability and the wide range of work experience and multiple integrated skill sets they bring with them. And in some cases, the skill sets and building approaches that immigrants brought with them have been blended with U.S. and, in particular, North Carolina building styles,

producing new hybrid approaches that are transforming and shaping industry techniques. One builder told us that the masonry and stone-working skills of his Mexican workers from Guanajuato, a state well known for its stone-work craftsmanship, had pushed him toward using more stone and less wood in residential home construction projects. A landscaper/construction contractor, after seeing the masonry skills of his Guatemalan *jardineros* (gardeners), replaced cement with mud and sand in the construction of stone walls, fountains, and ponds for residential projects. According to the landscaper, his affluent American clients loved the aesthetic and natural look of this hand-made technique and it gives him an edge on his competitors who largely rely on cement.

And workers appreciate recognition of the skill sets they acquired in their home communities. Immigrant workers are influenced, then, not only by their economic gains in the U.S. labor market, but also by their ability to transfer skill sets attained in labor markets in communities of origin and use them to improve work situations and job jump. Workers who were unable to use any or only part of their skill sets in U.S. jobs reported lower levels of job satisfaction than those who were able to use varied skills. As a whole, workers placed considerable importance on being able to use their skills and felt appreciated and valued because of this skills-based knowledge. In this way, their satisfaction with the job is directly related to reproducing their labor market experiences from home.

“¡Echa la Mano!”: *Brincando With Reskilling at Destination*

Once in the United States, many of the men underwent a reskilling process in which they learned new skills to perform a different job or an old job in a different way. Reskilling involves being exposed to new tools, technologies, and ways of doing things, a process that is especially important given the technological differences between the construction industry in places of origin and places of destination. Many tasks in construction that are mechanized in the United States, such as tile setting, plastering, and brick making and brick laying are completed by hand or with the use of simple hand tools in many communities in Mexico and Guatemala.

As immigrant workers are typically excluded from formal training and apprenticeship programs in North Carolina that could expose them to these new tools and methods and thus help them augment their skills sets, they rely on learning practices from places of origin—learning through observation and through on-the-job mentoring from a more-experienced worker or a skilled *maestro* or *encargado*.

Take the case of Eddy, a Guatemalan immigrant, who arrived in North Carolina in 2006, a boom period in construction. Having had very little construction experience in Guatemala, he was hired as an entry-level *ayudante*, a position he held for almost 2 years. During this tenure as an *ayudante*, he picked up new skills, framing and brick laying techniques. When we asked Eddy how he acquired those skills, he responded, “from people I work with and my cousin, who is the *encargado*, but most of all by watching how others did it.” Close observation and informal mentoring were the most common methods of learning among construction workers we spoke to in Mexico as well.

Employers’ reliance on migrant social networks for hiring facilitated these on-the-job learning practices. As in other immigrant-heavy industries, employers recruited new workers from the coethnic social networks in their existing workforce (Hagan, 1998; Waldinger & Lichter, 2003). Newcomers were taught new on-the-job skills by more established and skilled coethnics, some of whom were family and friends who helped them find work. Indeed, being an *ayudante* or informal apprentice to a seasoned coethnic or intermediary is often expected, an informal learning process referred to by some as “*echando la mano*” (to give a hand).

Reskilling on-the-job is also facilitated by the way in which work is socially organized. From our worksite observations and interviews, we documented that anywhere from three to five members of one ethnic group (Mexican, Guatemalan) make up a team that is usually supervised by an intermediary coethnic who has English language skills and reports directly to the subcontractor or project manager. Sometimes the composition of the small groups reflects the hierarchical structure from Mexico, with a *chalán*, an *ayudante*, and a *media cuchara*, the person supervising the *chalán* and *ayudante* but under the supervision of the *encargado* and *maestro*. Beyond informal training and opportunities for advancement, these crews, drawn on ethnic lines, serve other important social functions. They minimize intergroup conflict. They also provide social, cultural, and linguistic comfort to the members of the ethnic group since the ways in which they are organized resemble work at home.

Armed with new skill sets through reskilling in their U.S. jobs, immigrant workers continue to increase wages and move up the occupational ladder within the construction industry.

At the regional level of the labor market, migrants identified several pathways for *brincando*. A first pathway is initiated by a coethnic or nonethnic crew leader who recognizes the skills of a worker and nominates him for promotion. Take the case of Manuel, who was hired as an *ayudante* in mid-2006. When Manuel was first hired, his main job was cleaning up the job site, directing traffic, or fetching things for other workers and the crew leader, Ricardo, who is also his cousin. As an informal apprentice to Ricardo, and

through learning from others on his team he has since learned some basic carpentry, drywall installation, and masonry. The owner of the construction company also provided Manuel with formal training on safety practices. When Manuel was hired in 2006, he was earning US\$8 an hr; 2 years later, in 2008, he was earning US\$12 an hr. The owner of the firm relies on Ricardo to train his team. And Manuel depends on the support of Ricardo to negotiate wage increases for him. Manuel believes that he can earn up to US\$18 an hr with improved English skills, classes in reading blueprints, and training in operating heavy machinery. His goal is to follow in Ricardo's footsteps and become a *maestro*, surpass his cousin's US\$28-an-hr wage, and one day start his own construction business. To achieve these goals, Manuel plans to enroll in Durham Tech, a local community college that provides English and Spanish language classes in carpentry and blueprint reading. Working alongside coethnic bosses and employees has allowed Manuel and other newcomers the opportunity to acquire on-the-job skills and learn about the construction industry. In the short run, he has been rewarded for these skills and knowledge through the moderate but steady augmentation of hourly wages.

A second *brincando* pathway is created when a subcontractor lures a worker from his current job to work with him or recommends the worker to another firm. Take the case of Julio, an undocumented migrant who migrated from Paraiso, Honduras in 2004. Shortly after Julio arrived in North Carolina, a subcontractor hired him as an *ayudante*, earning US\$8 an hr. During his 2 years as an *ayudante*, through close observation and some on-the-job guidance from coworkers, he learned basic framing skills. He then approached his supervisor for feedback and further training on-the-job. After 2 years, he was promoted to the position of a framer and at a higher hourly wage. As a framer, he was reskilled in using new tools and measurement techniques. A year later, a friend who worked for another firm recommended Julio to his boss, who then interviewed and hired Julio as a framer at a still higher salary. After 6 months with this second company, he was promoted to foreman and earning US\$15 an hr. As foreman he has further reskilled and now works comfortably with wood, having acquired knowledge in the construction of stairs and roof frames. He is also now learning how to install air conditioners. His English has improved but he still insists that speaking English well is not a requirement in his work as all of his workers are Spanish speaking and his boss leaves all the day-to-day operations and communications to him. Julio's plans are ambitious; he aspires to more reskilling, especially to learn the trade of an electrician as it is one of the most highly paid jobs in construction.

Immigrants initiate a third *brincando* pathway when they acquire new on-the-job skills but are not being remunerated for them by their current employer, either because these new or improved skills have not been recognized or

because barriers such as legal status and language prevent the worker from negotiating for wage augmentation. In this case, the immigrant must market his new skill and broker with a potential employer for higher wages. As one worker explained:

Let's say I get hired by an *encargado* (crew leader) and I have no experience. He offers me the going entry wage in this area for an *ayudante*, which is \$8/hr. With time, I gain skills, in let's say carpentry. If I don't get paid more for that skill, then I have no choice but to leave. I then look for a job with another crew or company who will pay more for my additional skills.

This move does not preclude returning to the former employer. In fact, some immigrants interviewed reported being recruited back by former employers after they had acquired new skill sets through the additional jobs facilitated through *brincando*. When we asked how immigrant workers locate new employers, several respondents told us that they primarily connect with potential employers through personal and work networks. Other times, workers seek new employment through the informal economy; specifically, they go to a well-established immigrant day labor site in the Triangle Park area where they market their new skills and broker their wages to potential employers who frequent the labor site. As one Mexican immigrant from Guanajuato explained,

Let's say I have learned how to work with sheetrock. Well, then when a *gringo* comes by the site and asks for a *chirroquero* (a term created by immigrant workers to describe anyone who works with and installs sheetrock or drywall material), I can sell my new skill and earn \$12 as opposed to the \$8 I earned as an *ayudante*.

Often the matching between the job seeker and prospective employer involves signaling (Granovetter, 1981; Sorenson & Kalleberg, 1981). Some workers purposely wear grass-stained overalls to advertise their landscaping skills. We heard of one immigrant worker, who after learning painting and plastering skills on-the-job, donned himself in used painting overalls, a painter's cap, and a Sherwin Williams T-shirt, and marketed himself as a painter at the local day labor site.

The ability to *brincar* out of the ethnic economy and broker a deal with a noncoethnic requires some knowledge of English and the local construction labor market, which takes time. Francisco, a 35-year-old migrant from Guerrero

is a newcomer to the area labor market, having arrived in 2006. He finds work primarily at a day labor site and relies on a selected number of well-established second-tier Latino subcontractors (*encargados*) who recruit him on a regular basis for various job tasks. The *encargados* are paid directly by the subcontractor, who then pays Francisco. He knows that the *encargados* get a cut of his wage and recognizes that his wages could be much higher if he could negotiate his own jobs. According to Francisco, he has been unable to *brincar* out of the informal ethnic economy primarily because of his lack of English language–negotiating skills. Thus, while working alongside co-ethnics provided Francisco with the opportunity to acquire new skills and some wage augmentation by jumping jobs within the informal ethnic economy, he recognizes that to achieve permanent security and substantial economic mobility within the industry, he must have the choice to break from the informal labor market and ethnic economy, which requires enough English or nonethnic contacts to demonstrate skills and negotiate a job.

The practice of *brincando* also crosses industries and labor markets. Jaime, an immigrant from Mexico, is a skilled stone worker who is a full-time employee of a boutique landscaper. He also takes on side jobs with residential construction subcontractors who recruit him to build specialized stone fireplaces and other interior bathroom and kitchen stone installations. He has been able to transfer his skills across industries which provides Jaime with a range of mobility opportunities. *Brincando*, then, involves movement across formal and informal sectors of the economy and across particular industries, suggesting a much more fluid relationship between markets and industries than is usually depicted in the literature on immigrant labor market incorporation.

The capstone *brincando* is the ability to acquire the skills and know-how to become self-employed, a very arduous and limited prospect because of the undocumented status of so many immigrant construction workers in our North Carolina sample. Yet there are exceptions. Mariano and Nestor migrated from Guanajuato to the Research Triangle Park of North Carolina in 1988. Among the pioneer migrants from Guanajuato, the two brothers arrived at a time when the economy was undergoing massive restructuring and the construction industry was expanding. Despite having no work experience in construction or painting, they found regular work as *ayudantes* in the industry. Within several years, they landed permanent jobs with a painting firm. When they were hired, they were the only two Latinos among the crew, which forced the brothers to learn some English. Five years later, the crew was largely immigrant, composed of many of the brothers' relatives from Guanajuato, who had been recruited by the brothers. Over time, the workload fell

increasingly on the shoulders of Mariano and Nestor, but they were not being rewarded for the increased responsibility. By 2004, they had had enough. As Mariano reasoned, "We got tired of working for my employer. We worked for him for 15 years and in that time made him into a millionaire. So we decided to start our own businesses." The brothers had earned enough confidence and learned enough painting, dry wall, and management skills to go out on their own. Some knowledge of English cemented the move. Today, each of them has his own family painting business. As Mariano and Nestor's narrative demonstrates, labor market outcomes are more than a function of the education credentials and work experience that immigrants bring with them. Also, significant gains in the U.S. labor market cannot be explained only by access to coethnic resources and economies in the United States. Just as important are the years of work experience that immigrants accrue in U.S. labor markets (Bean, Leach, & Lowell, 2006), and the not so measurable attributes of confidence and risk.

Conclusion

In this article, we have written a lost chapter in the story of Latino immigrant labor in the U.S. construction and building trades. By and large, the immigration and labor market literature assumes that many undocumented Mexicans and Central Americans with low levels of traditional human capital are confined to unregulated sectors of the U.S. labor market, such as the construction and landscaping industries that with few exceptions are assumed to provide little opportunity for higher wages and occupational mobility and advancement opportunities. According to the literature, immigrant workers adjust to exploitation, discrimination, and blocked mobility in the secondary labor market by shifting back and forth between jobs in the informal and ethnic economies. Ironically, these movements recreate the very conditions of isolation and inequality that they are trying to escape (Light, 2006; Sassen, 1989; Theodore, Valenzuela, & Melendez, 2006; Zolniski, 1994).

Our research challenges these assumptions. We find that there is more variation in work experience and economic mobility opportunities than the literature portrays. Although some immigrants with low levels of traditional human capital are unable to escape exploitive and discriminatory jobs, others with similar attributes have been able to secure jobs that provide them with higher wages and occupational mobility opportunities. To understand the divergent fortunes of immigrant construction workers, we argue that scholars need to rethink the measurement of human capital and consider the role of agency in the fortunes of immigrants with low levels of traditional human

capital. By relying solely on country-specific credentials and easily-measurable skills to explain immigrant labor market outcomes in places of destination, human capital models are biasing research toward the study of elite immigrants (Williams, 2007). Although a few studies have considered harder-to-measure aspects of work experience among immigrants with low levels of education (Lowe et al., 2010; Ramírez & Hondagneu-Sotelo, 2009; Waldinger & Bailey 1991) such as informal on-the-job learning in immigrants' jobs in the United States, the research presented in this article is the first systematic attempt to consider the important role that informal skills learned and acquired on-the-job *in places of origin* have on the economic mobility opportunities of Latinos in U.S. labor markets. These transferred skill sets can translate into higher wages. This article also challenges political models of labor incorporation, which paint a bleak portrait of blocked mobility and exploitation of immigrant workers in the informal sector of the economy. Our research has demonstrated a far greater degree of agency among these workers. Through efforts to transfer existing skills from home and gain new ones in their U.S. jobs and the process of *brincando*, or job jumping, immigrants are able to improve wages, working conditions, and status.

In this article, we have initiated research aimed at better conceptualizing and measuring human capital and its relationship to economic mobility pathways by collecting detailed work histories and individual agency strategies on both sides of the border. The economy of the United States has faced a major downturn since the inception of this study, and many immigrants of all walks of life have lost their U.S. jobs and are returning to their countries of origin or transferring their skill sets to third country labor markets. Among the many migrants who are leaving the United States are men and women returning to their communities in Mexico.⁴ Is it not reasonable to assume that these women and men, like their elite counterparts, are taking home with them new skill sets acquired in the United States? Is it not reasonable to assume that, like their professional migrant counterparts, they too will transfer and use their new skills in Mexican labor markets to improve their economic situation in Mexico? And is it not reasonable to assume that skills transferred by migrants may also shape industry techniques and local economic development practices? Will this jump back from the U.S. labor market to the Mexican labor market represent the ultimate form of *brincando* in the occupational career of a migrant? These are research questions that will be explored in ongoing research in Mexico that focuses on return migration, skills transferability, and economic mobility and economic development.

Acknowledgments

We are grateful to Carolina Calvillo, Courtney Luedke, Brianna Mullis, and Sergio Chavez for research assistance and collaboration. We also thank Harley Browning, Rubén Hernández-León, Jean Luc Demonsant, Rafael Gallegos Lerma, the *Work and Occupations* editor, Dan Cornfield, and the anonymous reviewers for their insightful comments and suggestions.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Funding for this project was provided by the UNC Office of Economic and Business Development and the UNC Carolina Population Center.

Notes

1. The workers relayed the job position titles and skills to us in Spanish. There are no precise equivalents in English as many are regionally and locally based. In Guanajuato, Mexico, for example, an assistant or apprentice to a maestro is a *chalán*, whereas in southern Mexico *ayudante* is commonly used. In the United States these positions are reduced to general laborer.
2. However, the economic prospects for construction workers, especially Latino workers, looked bleak by mid 2008. Due to the slump on the construction industry, the unemployment rate for Latinos increased to 6.5% in the first quarter of the year, considerably higher than the 4.7% rate for non-Latinos. Immigrants were especially hard hit by the downturn in the industry. Their unemployment rate reached 7.5% (Pew Hispanic Center, 2007).
3. In summer 2010, a year after the completion of the field work by Hagan and Chavez, Hagan and Jean Luc Demonsant (University of Guanajuato) launched a larger project that focuses on the integration and reintegration of return migrants into the Mexican labor markets. The study includes interviews with a random sample of 200 return migrants and 200 nonmigrants in Leon, Guanajuato.
4. In March 2009, Mexico's government reported a 50% decline in the net outflow of emigrants during the 12-month period ending in August compared with the same period a year before. The Mexican government also reported increases in return migration, with close to 1 million return migrants since January 2007 (Pinkerton, 2009). Unauthorized flows to the United States from Mexico have also declined.

This is reflected in the changing size of the undocumented population in the United States. The number of unauthorized immigrants in the United States declined to 11.1 million in January 2009 from an all-time high of almost 12 million in January 2007 (Passel & Cohn, 2010).

References

- Akresh, I. R. (2006). Occupational mobility among legal immigrants to the United States. *International Migration Review*, 40, 854-884.
- Ansley, F., & Shefner, J. (Eds.). (2009). *Global connections and local receptions: New Latino immigrants to the southeastern United States*. Knoxville, TN: University of Tennessee Press.
- Applebaum, H. (1999). *Construction workers*. Westport, CT: Greenwood Press.
- Bailey, T., & Waldinger, R. (1991). Primary, secondary, and enclave labor markets: A training systems approach. *American Sociological Review*, 56, 432-445.
- Bates, T. (2008). Discrimination in the Chicago-area construction industry handicaps minority-owned firms. *Review of Black Political Economy*, 33, 4.
- Bean, F., Leach, D., & Lowell, L. (2006). Immigrant job quality and mobility in the United States. *Work and Occupations*, 31, 453-474.
- Bonacich, E., & Light, I. (1988). *Immigrant entrepreneurs: Koreans in Los Angeles, 1965-1982*. Berkeley and Los Angeles: University of California Press.
- Borjas, G. (1985). Assimilation and change in cohort quality revisited: What happened to immigrant earnings in the 1980s? *Journal of Labor Economics*, 13, 201-245.
- Borjas, G. J. (1995). The economic benefits from immigration. *Journal of Economic Perspectives*, 9(2), 3-22.
- Castells, M., & Portes, A. (1989). World underneath: The origins, dynamics, and effects of the world economy. In A. Portes, M. Castells, & L. Benton (Eds.), *The informal economy: Studies in advanced and less developed countries*. Baltimore, MD: John Hopkins University Press.
- Chavez, L. (1992) *Undocumented immigrants in American Society*. New York, NY: Harcourt Brace Jovanovich.
- Chavez, S., Mouw, T., & Hagan, J. (2008, April). *Occupational linguistic niches and the wage growth of Latino immigrants*. Paper presented at Session on Immigrants in New and Old Places, Annual Meetings of the Population Association of America, New Orleans, LA.
- Chiswick, B. R. (1986). Is the new immigration less skilled than the old? *Journal of Labor Economics*, 4(2), 168-192.
- Chiswick, B. R. (2000). Are immigrants favorably self-selected? An economic analysis. In C. D. Brettell & J. F. Hollifield (Eds.), *Migration theory: Talking across the disciplines* (pp. 61-76). New York, NY: Routledge.

- Cobb-Clark, D., & Kossoudji, S. (2000). Mobility in El Norte: The employment and occupational changes of unauthorized Latin American women. *Social Science Quarterly*, *81*, 311-324.
- Cornfield, D. (2009). Immigrant labor organizing in a "New destination city": Approaches to the unionization of African, Latino and Middle Eastern workers in Nashville. In F. Ansley & J. Shefner (Eds.), *Global connection and local receptions: New Latinos to the Southeastern United States* (pp. 279-298). Nashville: University of Tennessee Press.
- Craver, R. (2006, January 10). Building lives: Hispanics keep costs of construction down. *Winston-Salem Journal*.
- Dever, A. (2009). Tennessee: A new destination for Latino and Latino immigrants. In F. Ansley & J. Shefner (Eds.), *Global connection and local receptions: New Latinos to the Southeastern United States* (pp. 65-87). Nashville: University of Tennessee Press.
- Dustmann, C., & Fabbri, F. (2003). Language proficiency and labor market performance of immigrants in the UK. *Economic Journal*, *113*, 695-717.
- Dustmann, C., Fabbri, F., Preston, I., & Wadsworth, J. (2003). *Labor market performance of immigrants in the UK labor market* (Online Report 05/03). London, UK: Home Office.
- Duvander, A. Z. E. (2001). Do country-specific skills lead to improved labor market positions? An analysis of unemployment and labor market returns to education among immigrants in Sweden. *Work and Occupations*, *28*, 210-233.
- Erlich, M., & Grabelsky, J. (2005). Standing at the crossroads: The buildings trades in the twenty-first century. *Labor History*, *46*, 421-445.
- Evans, K., Hodkinson, P., & Unwin, L. (2002). *Transforming learning in the workplace*. London, UK: Kogan Page.
- Fine, J., Grabelsky, J., & Narro, V. (2008). Building a future together: Worker centers and construction unions. *Labor Studies Journal*, *33*(1), 27-47.
- Friedberg, R. (2000). You can't take it with you? Immigrant assimilation and the portability of human capital. *Journal of Labor Economics*, *18*, 221-240.
- Gallegos Lerma, R. M. (2011). Cooperation in the informal economy: A study of day laborers in North Carolina. (Unpublished Master's thesis). The University of North Carolina, Chapel Hill.
- Gertler, M. (2004). *Manufacturing culture: The institutional geography of industrial practice*. Oxford, UK: Oxford University Press.
- Glazer, N., & Moynihan, D. (1963). *Beyond the melting pot: The Negroes, Puerto Ricans, Jews, Italians, and Irish of New York City*. Cambridge, MA: MIT Press.
- Granovetter, M. (1981). Toward a sociological theory of income differences. In I. E. Berg (Ed.), *Sociological perspectives on labor markets* (pp. 11-47). New York, NY: Academic Press.

- Griffith, D. (2005). Rural industries and Mexican immigration and settlement in North Carolina. In V. Zúñiga & R. Hernández-León (Eds.), *New destinations: Mexican immigrants in the United States* (pp. 50-74). New York, NY: Russell Sage.
- Hagan, J. (1998). Social networks, gender and immigrant settlement: Resource and constraint. *American Sociological Review*, 63(1), 55-67.
- Hernández-León, R. (2004). Restructuring at the source: High-skilled industrial migration from Mexico to the United States. *Work and Occupations*, 31, 424-452.
- Hernández-León, R. (2008) *Metropolitan migrants: The migration of urban Mexicans to the United States*. Berkeley: University of California Press.
- Hondagneu-Sotelo, P. (1994). Regulating the unregulated: Domestic workers' social networks. *Social Problems*, 41, 201-215.
- Iskander, N., & Lowe, N. (2010). Hidden talent: Tacit skill formation and labor market incorporation of Mexican immigrant workers in the United States. *Journal of Planning Education and Research*, 30(2), 132-146.
- Iskander, N., Lowe, N., & Riordan, C. (2010). The rise and fall of a micro-learning region: Mexican immigrants and construction in center-south Philadelphia. *Environment and Planning A*, 42, 1595-1612.
- Kanas, F., & van der Lippe, T. (2009). Immigrant self-employment: Testing hypotheses about the role of origin and host-country human capital and bonding and bridging social capital. *Work and Occupations*, 36, 181-200.
- Kasarda, J., & Johnson, J. (2006). *The economic impact of the Hispanic population on the state of North Carolina*. Chapel Hill, NC: Frank Hawkins Kenan Institute of Private Enterprise.
- Light, I. (1972). *Ethnic enterprise in America*. Berkeley: University of California Press.
- Light, I. (2006). *Deflecting immigration: Networks, markets, and regulation in Los Angeles*. New York, NY: Russell Sage.
- Lowe, N., Hagan, J., & Iskander, N. (2010). Revealing talent: Informality and intermediation as emergent pathways to immigrant labor market incorporation. *Environment and Planning A*, 42, 205-222.
- Maccio, F. (2009). *Live wire: Women and brotherhood in the electric industry*. Philadelphia, PA: Temple University Press.
- Massey, D. (2008). *The changing geography of American immigration*. New York, NY: Russell Sage.
- McManus, W. S. (1985). Labor market costs of language disparity: An interpretation of Hispanic earnings differences. *The American Economic Review*, 75, 818-827.
- McManus, W. S., Gould, W., & Welch, F. (1983). Earnings of Hispanic men: The role of English language proficiency. *Journal of Labor Economics*, 1, 101-130.
- Milkman, R. (Ed.). (2000). *Organizing immigrants: The challenge for unions in contemporary California*. Ithaca, NY: ILR Press.
- Milkman, R. (2006). *L.A. story: Immigrant workers and the future of the labor movement*. New York, NY: Russell Sage.

- Milkman, R., & Wong, K. (2000). Organizing the wicked city: The 1992 southern California Drywall strike. In R. Milkman (Ed.), *Organizing immigrants: The challenge for unions in contemporary California*. Ithaca, NY: ILR Press.
- Mohl, R. A. (2003). Globalization, Latinization, and the Nuevo New South. *Journal of American Ethnic History*, 22(4), 31-66.
- Orrenius, P., & Zavodny, M. (2004). *What the consequences of an amnesty for undocumented workers?* (Working Paper 2004-10). Atlanta, GA: Federal Reserve Bank of Atlanta.
- Paap, K. (2006). *Working construction: Why White working class men put themselves—and the labor movement—in harm's way*. Ithaca, NY: Cornell University Press.
- Palladino, G. (2005). *Skilled hands, strong spirits: A century of building trades history*. Ithaca, NY: Cornell University Press.
- Parrado, E., & Kandel, W. (2008). New Hispanic migrant destinations: A tale of two industries. In D. Massey (Ed.), *New faces in new places: The changing geography of American immigration* (pp. 99-123). New York, NY: Russell Sage.
- Passel, J., & Cohn, D. (2010). *U.S. unauthorized flows are down sharply since mid-decade*. Washington, DC: Pew Hispanic Center.
- Pew Hispanic Center. (2007, March 7). *Construction jobs expand for Latinos despite slump in housing market* (Fact sheet). Washington, DC: Author.
- Pinkerton, J. (2009, March 29). Reversing course for survival. *Houston Chronicle*.
- Pisani, M. J., & Yoskowitz, W. D. (2005). Grass, sweat, and sun: An exploratory study of the labor market for gardeners in south Texas. *Social Science Quarterly*, 86, 229-251.
- Pisani, M. J., & Yoskowitz, W. D. (2006). Opportunity knocks: Entrepreneurship, informality, and home gardening in south Texas. *Journal of Borderland Studies*, 21(20), 59-76.
- Polanyi, M. (1966) *The tacit dimension*. London, UK: Routledge & Kegan.
- Portes, A. (2009). The new Latin nation: Immigration and the Hispanic populations of the United States. In F. Ansley & J. Shefner (Eds.), *Global connections and local receptions: New Latino immigrants to the southeastern United States* (pp. 3-34). Knoxville, TN: University of Tennessee Press.
- Portes, A., Castells, M., & Benton, L. (1989). *The Informal economy: Studies in advanced and less developed countries*. Baltimore, MD: John Hopkins University Press.
- Ramírez, H., & Hondagneu-Sotelo, P. (2009). Mexican immigrant gardeners: Entrepreneurs or exploited workers? *Social Problems*, 56(1), 70-88.
- Reich, R. (1991). *The work of nations: Preparing ourselves for 21st-century capitalism*. London, UK: Simon & Schuster
- Reimer, J. (1979). *Hard hats: The work world of construction workers*. Beverly Hills, CA: SAGE.
- Sarmiento, S. T. (2002). *Making ends meet: Income generating strategies among Mexican immigrants*. New York, NY: LFB Press.

- Sassen, S. (1989). New York city's informal economy. In A. Portes, M. Castells, & L. A. Benton (Eds.), *The informal economy: Studies in advanced and less developed countries*. Baltimore, MD: Johns Hopkins University Press
- Saxenian, A. (1996). Beyond boundaries: Open labor markets and learning in Silicon Valley. In M. Arthur & D. Rousseau (Eds.), *Boundaryless career: Work, mobility, and learning in the organizational era*. New York, NY: Oxford University Press.
- Shih, J. (2006). Circumventing discrimination: Gender and ethnic strategies in Silicon Valley. *Gender and Society*, 20(2), 177-206.
- Shih, J. (2007). Job-hopping: Social networks in the global high-tech industry. In C. B. Brettel (Ed.), *Constructing borders/crossing boundaries: Race, ethnicity and immigration* (pp. 219-241). Lanham, MD: Lexington Books.
- Sjastaad, I. A. (1962). The costs and returns of human migration. *Journal of Political Economy*, 70, 80-93.
- Silver, M. (1986). *Under construction: Work and alienation in the building trades*. Albany, NY: SUNY Press.
- Smith, J., & Edmonston, B. (1997). *The new Americans: Economic, demographic, and fiscal effects of immigration*. Washington, DC: National Academy Press.
- Sorensen, A. B., & Kalleberg, A. L. (1981). An outline of a theory of the matching of persons to jobs. In I. Berg (Ed.), *Sociological perspectives on labor markets* (pp. 49-74). New York, NY: Academic.
- Spenner, K. (1990). Skill: Meaning, methods, and measures. *Work and Occupations*, 17, 399-421.
- Theodore, N., Valenzuela, A., Jr., & Meléndez, E. (2006). *La Esquina* (The corner): Day laborers on the margins of New York's formal economy. *Journal of Labor and Society*, 9, 407-423.
- U.S. Bureau of Labor Statistics. (2009). North Carolina wages and salaries by industrial sector. Retrieved from http://www.bls.gov/oes/2002/oes_nc.htm#b47-0000
- U.S. Census Bureau. (2001, December 7) *Hispanic or Latino origin: All races mapping census 2000: The geography of U.S. diversity*. Retrieved from http://www.census.gov/population/www/cen2000/dt_atlas.html
- U.S. Census Bureau. (2006-2008). *American community survey*. Retrieved from <http://factfinder.census.gov>
- U.S. Census Bureau. (2007). *The American community Hispanics 2004. American community survey reports*. Retrieved from <http://www.census.gov/prod/2007pubs/acs-03.pdf>
- U.S. Census Bureau. (2009). *Hispanic population by state*. Retrieved from <http://quickfacts.census.gov/qfd/states/37000.html>
- Valdez, Z. (2008). The effect of social capital on Korean, White, Mexican, and Black business owners' earnings. *Journal of Ethnic and Migration Studies*, 34, 955-974.

- Valenzuela, A., Jr. (2006). New immigrants and day labor: The potential for violence. In R. Martinez & A. Valenzuela, Jr., *Immigration and crime: Ethnicity, race, and violence*. New York, NY: NYU Press.
- Walden, M. L. (2008). *North Carolina in the connected age: Challenges and opportunities in a globalizing economy*. Chapel Hill: University of North Carolina Press.
- Waldinger, R., & Bailey, T. (1991). The continuing significance of race: Racial conflict and racial discrimination in construction. *Politics and Society, 19*, 291-323.
- Waldinger, R., & Lichter, M. I. (2003). *How the other half works: Immigration and the social organization of labor*. Berkeley: University of California Press.
- Waldinger, R., Erickson, C., Milkman, R., Mitchell, D., Valenzuela, A., Wong, K., & Zeitlin, M. (1996). *Helots no more: A case study of the justice for janitors campaign in Los Angeles* (Working Paper No. 15). Ralph and Goldy Lewis Center for Regional Policy Studies, UCLA, Los Angeles, California.
- Williams, A. (2007). International labor migration and tacit knowledge transactions: A multi-level perspective. *Global Networks, 7*(1), 29-50.
- Wilson, K. L., & Portes, A. (1990). Immigrant enclaves: An analysis of the labor market experiences of Cubans in Miami. *The American Journal of Sociology, 86*, 295-319.
- Zaman, H., Diocson, C., & Scott, R. (2007). *Workplace rights for immigrants in British Colombia: The case of Filipino workers. An economic security project report*. Vancouver: Canada Centre for Policy.
- Zolniski, C. (1994). The informal economy in an advanced industrial society: Mexican immigrant labor in the Silicon Valley. *Yale Law Journal, 103*, 2304-2335.
- Zúñiga, V., & Hernández-León, R. (2005). *New destinations: Mexican immigrants in the United States*. New York, NY: Russell Sage.

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