Train Them to Retain Them: Work Readiness and the Retention of First-time Women Workers in India

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Abstract
To explore when and why workplace training facilitates the retention of first-time workers from historically underrepresented groups in formal employment, I combine ethnographic fieldwork at an Indian garment factory employing first-time women workers, personnel data over a two-year period, and survey data from a sample of new hires. I find that training is effective at preventing first-time women workers from dropping out soon after they are hired when it is conducted by trainers with many years of experience. Rather than focusing only on job-specific skills, training conducted by experienced trainers includes the basic work-readiness skills of self-presentation, interpersonal communication, work–life separation, and self-reliance needed to survive at work. I find that first-time women workers quasi-randomly assigned to experienced trainers had about a 20-percent greater probability of being retained after three months, and these workers reported that they felt more ready for work than those assigned to less-experienced trainers. My results imply that for the majority of workers from historically underrepresented groups who are entering the workplace for the first time, training is important to foster their retention, and organizations that focus on both the attributes of the people delivering that training and its content have a greater chance of keeping these workers for the long term.

Keywords: work, turnover, gender, labor markets, work-readiness skills, job retention

Certain groups in society have been historically underrepresented in the formal labor force, unable to experience the monetary and nonmonetary benefits associated with work (Baron and Bielby, 1985; Reskin, 2003; Epstein, 2007). Members of these groups often face economic, social, and psychological barriers that prevent them from participating in formal employment, such that

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even when they gain entry into organizations, they are likely to drop out soon after joining (Smith, 2005). In the U.S., first-time employees who are black, single mothers, or inner-city youth disproportionately quit within weeks of joining organizations (Ballen and Freeman, 1986; Holzer and Lalonde, 2000). Similarly, women in developing countries, who have traditionally been absent from the labor force, are now entering factory employment but quitting in large numbers soon after joining (Barry, 2016). This high early turnover rate negatively affects the workers, as longer employment tenures generally result in better economic and personal-welfare outcomes (Kabeer, 2002), and it harms employers by imposing recruitment and training costs and by reducing workforce diversity (Slichter, 1921).

Some scholars of organizational inequality have touted workplace training programs as crucial to retaining first-time workers from groups historically underrepresented in formal employment (e.g., Doeringer, 1969; Newman and Winston, 2016). To the extent that first-time workers have deficient knowledge and skills due to their experiences before entering the labor market, workplace training may bring them up to speed and enhance their career prospects (Lynch, 2007). Other scholars have asserted, however, that such training programs are often poorly designed, not meaningfully linked to existing organizational structures, and therefore ineffective (Dobbin, 2009; Kalev, 2009). Thus, though training programs have been widely adopted, there appears to be little consensus about when they are effective and about the mechanisms through which training facilitates the early retention of first-time workers from underrepresented groups.

The literature on organizational socialization offers an approach to exploring these issues. By investigating the processes that organizations use to socialize newcomers (Saks and Gruman, 2012; Ashforth, Harrison, and Sluss, 2014), it has produced two important findings: first, that certain people in organizations, such as peers and supervisors, play a central role in socialization processes by acting as socialization agents, and second, that the content of socialization is the conduit or mechanism whereby socialization processes influence work-adjustment outcomes (Saks and Ashforth, 1997; Bauer, Morrison, and Callister, 1998). This literature has tended, however, to study predominantly white-collar work in Western economies, in which newcomers have been exposed to the norms of formal employment since childhood (Jablin, 2001; Ashforth, Sluss, and Harrison, 2007); thus it has not identified the socialization agents and content best suited to first-time workers from historically underrepresented groups.

This study investigates the conditions under which socialization agents facilitate the retention of first-time workers and explores the learning that underlies this process, using data from a garment factory in India that hires and trains impoverished women workers, many of whom are entering the workforce for the first time. To conduct this study, I adopt a full-cycle research approach (Fine and Elsbach, 2000), drawing on ethnographic fieldwork, personnel data tracking newcomers quasi-randomly assigned to different trainers, and survey data from a sample of newcomers. I consider how trainers’ level of experience and their focus on work-readiness skills essential to survive at work may influence retention.
RETENTION OF FIRST-TIME WORKERS FROM HISTORICALLY UNDERREPRESENTED GROUPS

The organizational inequality literature has shown that, in both developed and developing countries, early turnover is high among first-time workers from historically underrepresented groups (Moen, 1985; Brinton et al., 1995; Alon, Donohoe, and Tienda, 2001; Smith, 2005; Alon and Haberfeld, 2007). Over half the black employees hired by a U.S. technology firm quit within a year (Petersen, Saporta, and Seidel, 2000), and about one-quarter of new female employees at Indian call centers leave within 45 days (Ranganathan and Kuruvilla, 2008). Given these high early turnover rates and the costs imposed on employers and workers alike (Slichter, 1921), it is imperative to investigate what organizations can do to retain such workers. One organizational practice that newcomers encounter early in their careers and that is likely to influence retention is workplace training.

The Impact of Workplace Training Programs

Workplace training programs have been studied frequently in management, sociology, and economics (e.g., Becker, 1964; Knoke and Kalleberg, 1994; Bishop, 1996; Dobbin, Schrage, and Kalev, 2015). Institutional theorists have asserted that training programs emerge in response to coercive, normative, and mimetic institutional pressures that firms face (Scott and Meyer, 1991; Monahan, Meyer, and Scott, 1994). Human capital theorists have argued that training programs are a means to augment workers’ job-related skills and thus their productivity (Schultz, 1961; Mincer, 1962). Internal labor market theorists have posited that employer-sponsored training programs generate attachment to the employer and elicit organizational identification (Doeringer and Piore, 1971; Osterman, 1987).

Though general theories on the role and emergence of training programs abound, inequality scholars have concentrated on empirically investigating the effect of such programs on first-time workers from historically underrepresented communities. Some research has examined the role of government-sponsored job training programs in encouraging first-time workers to join the workforce, but the evidence is mixed on whether such public programs are effective (LaLonde, 1995; Heckman, LaLonde, and Smith, 1999; Martinson and Strawn, 2003). Other research has focused on in-house training programs that teach job skills by means of formal technical education and informal coaching by workplace supervisors (Doeringer, 1969; National Civil Service League, 1973; Holzer and Martinson, 2005). Examples of such programs include Kaiser Aluminum’s in-plant training program to make craft jobs accessible to black workers (Kalev, 2009) and Bell System’s program to accommodate new workers with educational deficiencies (Doeringer, 2012).

On the one hand, scholars argue that such employer-sponsored training programs have the potential to reduce poverty and inequality by promoting the retention of newcomers from minority communities (Kalleberg and Sorensen, 1979; Holzer and Martinson, 2005). To the extent that first-time workers from underrepresented groups lack skills because of pre-labor-market disadvantages, employer-sponsored job training can help them sustain employment (Doeringer, 1969). Such training also allows workers to earn an income while
improving their human capital, which motivates them to stay with the organization longer (Lynch, 1992; Gritz, 1993; Holzer, 2001). On the other hand, other scholars have argued that in practice organizational training has not lived up to its potential to compensate for pre-labor-market disadvantages and has had no effect on the careers of first-time workers from underrepresented communities (Solie, 1968; Appelbaum and Berg, 2001; Kalev, 2009). These scholars have asserted that training programs are often poorly designed and not meaningfully linked to actual organizational structures and practices, producing no discernible effect on retention (Hodson, Hooks, and Rieble, 1994; Dobbin, 2009; Kalev, 2009). Additionally, training programs are sometimes adopted not to address the problem of early turnover but merely as a ceremonial gesture to reduce legal risk (Yang, 2006).

Given this lack of consensus about when and why workplace training facilitates organizational retention, I turned to the literature on organizational socialization, which has long focused on training and socialization in white-collar settings in Western economies. I discovered two factors that have thus far been absent from the inequality literature’s analysis of training: the agents who deliver training and the content of that training. Insights from this literature guided my study of the impact of training and socialization on retention in organizations that hire workers from historically underrepresented groups.

Socializing Organizational Newcomers

Socialization—the process by which individuals learn to fit into a particular social context, whether a job role, occupation, or organization—has received considerable scholarly attention (for reviews, see Saks and Gruman, 2012; Ashforth, Harrison, and Sluss, 2014). Findings from this rich body of work attest to the importance of socialization processes for people’s eventual integration into groups and organizations (e.g., Saks and Ashforth, 1997; Allen, 2006; Bauer et al., 2007). This research has also linked various forms of socialization to specific variables measuring adjustment, ranging from attitudes and behaviors to outcomes such as satisfaction and turnover (e.g., Van Maanen and Schein, 1979; Bauer, Morrison, and Callister, 1998).

Scholars have found that organizational insiders, particularly peers and supervisors, play a central role in workers’ socialization processes by acting as socialization agents (Reichers, 1987; Kram, 1988; Bauer, Morrison, and Callister, 1998; Ramarajan and Reid, 2016). Some organizations create formal roles, such as trainer or mentor, for socialization agents; in other organizations the role of socialization agents is informal (Saks and Gruman, 2012; Sluss and Thompson, 2012). Agents of both types typically provide advice, job instruction, and social support to new employees (Louis, Posner, and Powell, 1983). Comparisons of socialization agents in different roles have shown that some types of agents are more relevant than others for specific domains of socialization (Morrison, 1993): for example, supervisor agents provide more role and performance information, and coworker agents provide more group-specific and social information (Ostroff and Kozlowski, 1992). But in this work, “the emphasis has been on coworkers and supervisors” (Saks and Gruman, 2012: 42); less attention has been paid to formal socialization agents—in particular to individual differences among agents enacting the same role—and to how these differences could affect workers’ outcomes.
Scholars have also argued that the content of socialization—what is actually learned—lies “at the heart of any organizational socialization model” and is the conduit or mechanism by which socialization influences adjustment outcomes (Cooper-Thomas and Anderson, 2005: 117). For socialization to effectively bring a newcomer into the fold, the newcomer should come to know and understand the norms, values, tasks, and roles that typify group and organizational membership (Saks and Ashforth, 1997). Multiple typologies of socialization content have been proposed and tested (Ostroff and Kozlowski, 1992; Morrison, 1993; Chao et al., 1994; Taormina, 1994; Morrison, 1995), which agree that learning mostly entails familiarization with a worker’s job role and the nature of the organization. However, scholars have begun calling for more research on “specific learning domains” that might be relevant in particular contexts or among particular populations of workers (Ashforth, Sluss, and Harrison, 2007: 20).

Further, socialization research has predominantly focused on a narrow range of contexts. Ashforth and colleagues (2007: 53) noted that “we know relatively little about socialization in international contexts.” Fisher (1986: 105) also observed that socialization research has “tended to concentrate in the same few occupations,” using well-educated white-collar samples. Importantly, white-collar workers in Western economies are generally exposed to workplace and occupational norms by their families, educational institutions, and the media even before they enter the workforce (Jablin, 2001). This study fills gaps in the existing training and socialization literatures by focusing on training agents and the learning they impart to new workers entering a blue-collar setting in India that hires large numbers of women from impoverished communities who are entering formal employment for the first time.

FULL-CYCLE METHODOLOGY AND FINDINGS

To investigate the impact of training and socialization on the early retention of first-time workers, I adopted a full-cycle research approach, which combines inductive and deductive methodologies (Cialdini, 1980; Fine and Elsbach, 2000; Ranganathan, 2017). I first conducted ethnographical fieldwork and interviews at an organization employing first-time women workers, which generated my theory and hypotheses. I then tested the hypotheses using unique personnel data on the training and attrition outcomes of individual workers, supplemented by a hand-collected survey.

Setting: Indian Garment Factory Hiring and Training First-time Women Workers

In India, women have historically had limited employment opportunities and have thus been underrepresented in the labor market (Pande and Moore, 2015). Over the past decade, however, large garment-manufacturing enterprises have begun hiring rural women entering the labor force for the first time (Barry, 2016). Routinely, a handful of women with no prior work experience walk into these factories seeking employment as entry-level sewing-machine operators. I obtained access to one such factory in the southern Indian state of Karnataka. It specializes in menswear, including shirts, trousers, and jackets, and earns about $.5 million in annual revenues. The factory employs 2,000 workers, over 90 percent of whom are women. Like other factories in the
region, it recruits predominantly from nearby villages where women have few other sources of employment. More than half of the women the factory employs are first-time workers. These new employees, who typically come from impoverished circumstances, can earn a stable income for the first time in their lives and help support their households. Though local women value the unprecedented opportunity to earn an income at the factory, a sizeable proportion of the first-time women workers quit and drop out of the workforce within months of joining. Those who manage to hold onto their jobs are fundamentally transformed by formal employment; others are simply unable to sustain employment, despite wanting to work and recognizing the benefits of regular employment. This factory has earnestly tried to retain the women who join because employee churn is expensive. It has consistently offered an above-market wage and other attractive benefits such as child care.

One organizational program the factory offers its workers soon after they join is training to learn a specific garment operation. The training program is individualized; each newcomer is trained one-on-one by a single trainer. The focus of the program is on practical, on-the-job skills. A newcomer is assigned to an empty sewing machine on the line where she will eventually work, so training is conducted on the production line. For the most part, a newcomer sits at her designated machine while the trainer stands beside her offering instructions and suggestions. During training, therefore, newcomers interact almost exclusively with their trainers. On average, training lasts about three weeks. After learning to operate a sewing machine, newcomers are taught a specific operation, such as stitching a shirt collar; they practice on "mock pieces," first to execute the operation satisfactorily and then to increase their speed. Once they achieve "80 percent efficiency"—a measure used internally to evaluate the number of pieces produced in an hour—they are put on the production line.

Qualitative Methods: Ethnographic Observation and Interviews

I conducted ethnographic observation with two research assistants between June 2014 and June 2015, producing over 200 single-spaced pages of field notes about the training process. To prevent bias in our observations, these qualitative data were collected prior to seeing any quantitative data. I also conducted 45 in-depth interviews at the factory, with all the trainers and with samples of new employees, supervisors, industrial engineers, and human resource (HR) managers. Observation focused on newcomers’ experiences, from the time they first walked into the factory looking for work through the recruitment and training processes to employment on the lines. The interviews concentrated on stresses that newcomers faced at the workplace, their conflicts over whether to remain at the factory, and individual trainers’ approaches to training. I also conducted five home visits to newcomers in their villages, on holidays or on weekends, to familiarize myself with their home lives and to meet their families. I analyzed the qualitative data inductively, using Atlas.ti (Glaser and Strauss, 1967; Strauss and Corbin, 1990). My analysis consisted of reading field

1 Because training is not conducted in a classroom or in groups, peer and cohort effects are minimal.
Qualitative Findings and Hypotheses Development: Agents and Content of Training

I began my fieldwork by observing and interacting with a sample of first-time women workers when they arrived at the factory seeking a job. My fieldnotes describe these women as “very nervous . . . and also incredibly quiet, quite the contrast from the women working in the lines who chat away with abandon.”

My notes describe my effort to converse with one 24-year-old first-time worker: “I could barely hear her voice as she spoke, she shied away from making eye contact, her hands and legs were shaking . . . and her mouth quivered as she spoke.” The hiring manager explained, “Most of these women have rarely stepped out of their home. . . . They’ve never seen anything like a factory before, and everything and everyone is intimidating to them.”

Within a few weeks, some but not all of the women exhibited a dramatic transformation in self-confidence. A month after I first met her, the same 24-year-old called to me across the shop floor, “Hi, Akka [big sister], have you eaten breakfast yet?” This time she looked right at me, and her body language exuded self-assurance. But this kind of transformation was not universal; other newcomers remained shy and diffident. These varied trajectories were apparent to others as well. As one HR manager said, “Yes, some change fast. They open up a lot more and talk more. In fact, it is important that they change and adjust in the first three months . . . or else they quit and never come back.”

My observation of the sample of newcomers revealed that, indeed, many first-time workers quit in less than three months, and these dropouts seemed disproportionately to be those who remained “scared, timid, and hesitant when answering questions.” One woman who left the factory after six weeks said to me, “I am disappointed in myself . . . but I just couldn’t do it.”

To pinpoint why some first-time workers persisted and others did not, I interviewed several managers and veteran workers. Both groups emphasized the important effect of training and, in particular, of trainers on retention. “The trainer has the important task of preparing the newbie for the world of work—and especially for the world of garment-factory work, which is a high-stress, physically challenging work environment,” one manager said. “If the trainer does their job well, the workers are set for life.” Management’s position was that all trainers did their job well, but the word on the shop floor was that “the experienced ones are better.” One worker listed the experienced trainers by name and commented, “These trainers are very good. All the workers love them.”

Training in this factory was conducted by 11 trainers, all former line employees who had been promoted to the role of trainer after demonstrating exceptional skill at a wide range of garment operations. The length of the trainers’ experience varied, and I observed that the pedagogical approach of the experienced trainers differed strikingly from that of their less-experienced counterparts. The trainers had considerable autonomy; they were free to interpret training protocols and manuals as they saw fit. Thus the training experiences of

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2 Quotations in this section not explicitly attributed to specific informants are from my fieldnotes.
women assigned to different trainers varied markedly: about half of the first-time workers I observed were assigned to experienced trainers, and these newcomers seemed to emerge from training better adjusted and stayed at the factory longer.

The literature on organizational inequality has paid scant attention to the question of how different trainers might differentially affect workers’ retention. The socialization literature has theorized about the individuals responsible for training in organizations, designating them as “socialization agents,” and has shown that they play an important role in newcomers’ adjustment (Bauer, Morrison, and Callister, 1998; Saks and Gruman, 2012). Moving beyond this literature, however, my field data suggest not only that formal socialization agents play a central role in socialization but also that individual agents with varying levels of experience enact the same role differently, differentially affecting retention. Building on this field observation, I hypothesize:

**Hypothesis 1:** When first-time women workers are assigned to experienced trainers, they are more likely to be retained.

Having observed newcomers assigned to both experienced and less-experienced trainers, I was intrigued by how different trainers fostered retention. My observation revealed important differences in the content they provided. Less-experienced trainers focused almost exclusively on job-specific knowledge, such as “ensuring that operators excel in production,” but experienced trainers additionally imparted knowledge on what I call “work readiness.” One experienced trainer characterized work readiness as “the right mindset to deal with work so that [workers] don’t break down at every slight thing.” Another observed that newcomers “need to be taught how to interact with employees, how to stay motivated… Just knowing the operation is not enough.” Coding of my qualitative data revealed that work readiness in this context has four components, to which experienced trainers devoted roughly equal attention: self-presentation, interpersonal communication, work–life separation, and self-reliance. A focus on these four components that could affect newcomers’ retention distinguished the training approaches of experienced trainers from those of their less-experienced counterparts.

**Self-presentation.** Experienced trainers advised newcomers, in a way that less-experienced trainers did not, on how to present themselves at work. This advice ranged from “what to wear to work” and how to “smile, be cheerful, and appear confident” to fundamental aspects of learning to work, such as time discipline. One experienced trainer told me, “I advise my trainees on how to make sure they reach the factory by nine in the morning [because] the idea of reaching somewhere by a certain time is new to them.” Newcomers corroborated the value of such advice. One new employee, assigned to an experienced trainer, said she used to “wake up when the sun rose, finish her household chores, walk to the bus stop and take the first bus that came by,” resulting in scolding at the factory gate for being late, until her trainer helped

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3 For a notable exception, see Bezrukova, Jehn, and Spell (2012).
plan her commute. A newcomer assigned to a less-experienced trainer said that “no one has advised me on this issue, and to this day I’m always late.”

**Interpersonal communication.** Experienced trainers also taught their trainees interpersonal communication skills, which extended beyond simply learning the norms of communication at the factory to fundamentally learning how to approach and talk to strangers. All trainers, experienced or not, seemed to agree that, as one put it, “if [newcomers] don’t talk openly and get over their shyness, they will not learn the operation properly.” More importantly, “they will never survive on the lines [where] there are lots of people around” and “supervisors often shout and coworkers often comment on newcomers.” Experienced trainers used multiple strategies to get newcomers to “open up.” One said, “I often reveal personal information about myself, and disclose how scared I was when I first joined work, in order to get trainees to talk.” I observed another experienced trainer introducing a trainee to other workers on the line and encouraging her to “make friends.” Less-experienced trainers, by contrast, asserted that whether trainees acquired such interpersonal skills “depended on [their] nature” and that “some automatically pick it up while others don’t.”

**Work–life separation.** The experienced trainers I observed continually advised their trainees to strike a balance between home and work. One asserted that “failing to separate work and home lives is a key reason why women quit. . . . These women face a lot of personal issues that affect them at work. They get up at 5 a.m., do everything at home, handle chores, cook, clean, take care of children and, to top it all, they often have financial problems and unsupportive family members.” Each of the experienced trainers I interviewed described trainees who, in the words of one trainer, “cried every day worrying about their family and personal problems.” Experienced trainers thus considered it crucial to understand each trainee’s personal situation and to “counsel these women on how to deal with balancing work and personal issues.” Less-experienced trainers, by contrast, avoided “messy personal issues.” Thus newcomers assigned to less-experienced trainers more often reported being “exhausted” and “stressed.” One even reported “brain freezes as a result of home and work pressures.” By contrast, newcomers assigned to experienced trainers more typically reported that they were, in the words of one trainee, “getting used to managing” both home and work.

**Self-reliance.** Finally, experienced trainers saw it as part of their job to help newcomers become self-reliant enough to take care of themselves at the factory. In the words of one trainer, “When the newcomers come in . . . [they are unfamiliar with] even the basics [of] how to eat or go to the bathroom [in public].” Also, she added, “Work pressure is something completely new to the employee,” causing workers to neglect their own needs even more. Thus, one experienced trainer explained, they “needed to treat [newcomers] like children at first.” For example, one experienced trainer said that she “insists on [her newcomers] drinking water regularly, shows [them] around the line [so that they] know where the restrooms are,” and advises them “on eating right and
on time, because some operators skip meals to catch up on work.” According to one trainer, many newcomers assigned to experienced trainers had “established a routine where they come into work at 9 a.m., drink water and visit the restroom at 10 a.m., have tea at 11 a.m. and lunch at 12:30 p.m.” Less-experienced trainers, by contrast, asserted that these matters were “too basic and personal” and “cannot be taught.” Interviews with newcomers assigned to less-experienced trainers revealed that many of them “did not know where the bathroom was.”

The organizational inequality literature has paid little attention to such basic training content (Dobbin, Schrage, and Kalev, 2015); the socialization literature, in keeping with its focus on white-collar workers in Western economies in which newcomers are more likely to already understand the basics of work readiness (Ashforth, Sluss, and Harrison, 2007), has focused on familiarization with the job role and the organization. My field data uncovered work readiness as an undertheorized socialization content area and delineated four dimensions of work readiness. Building on the qualitative data, I hypothesize:

**Hypothesis 2:** Experienced trainers foster the retention of first-time women workers by imparting work-readiness learning about self-presentation, interpersonal communication, work–life separation, and self-reliance.

Having derived two testable hypotheses from my fieldwork about when and why organizational training might be effective in facilitating early retention, I collected quantitative data on the training and work experiences of a sample of first-time women workers to test them.

**Quantitative Data and Measures**

The quantitative data consist of personnel records on a main sample of 510 first-time women workers who entered the garment factory over the two-year period from October 2012 through September 2014 plus survey data on a sample of 50 different first-time women workers. None of these women had prior employment experience, as revealed by their job applications. The personnel records provided data on the newcomers’ (1) baseline characteristics, such as age and educational level; (2) specific information from training records, such as trainer assignment and length of training; and (3) workplace outcomes, such as daily output and attrition. In the absence of personnel data on the “work-readiness” mechanism, I surveyed 50 newcomers who graduated from training and entered the lines in January–February 2015. The 15-page survey captured data on these newcomers’ training experiences and enabled me to measure their work readiness using a scale based on my ethnographic observation.

Table 1 presents descriptive statistics on the 510 newcomers in my main sample. It is striking that 11 percent left the factory within one month and 36 percent left within three months of joining. Clearly, many women were unable to sustain employment despite wanting to work and recognizing the benefits of regular employment. Demographically, the survey sample did not differ from newcomers in the main sample who joined the factory during the same two-month period. Workers entering the factory in different seasons vary slightly in their demographic characteristics, however; thus workers in the survey sample were more likely to be married and to have children than those in the main
sample of 510 workers who had joined over a two-year period. Given these differences, I controlled for a host of demographic variables in all my models, including marital status and number of children, and my main analyses included fixed effects for every month/year combination between October 2012 and September 2014. For a discussion of the implications of possible differences between the survey sample and the main sample, see the Limitations and Policy Implications section.

To test hypothesis 1, I used the main sample to estimate the impact of assignment to experienced trainers on newcomers’ likelihood of retention. I used ordinary least squares (OLS) models predicting newcomer retention as they offer an easy percentage interpretation given the dichotomous dependent variable; results are also robust to the use of logit or probit models instead. Standard errors in all models are clustered by trainer, allowing me to account for error structures robust to a group-level covariance. To test hypothesis 2, I similarly used an OLS model with standard errors clustered by trainer to estimate the impact of assignment to an experienced trainer on work readiness, this time using the survey sample. I used this approach rather than adding the work-readiness variable to the regression estimating retention because data for this mechanism are unavailable for the 510 newcomers in the main dataset.

**Identification strategy.** To test the effect of assignment to experienced trainers on work readiness and retention, a typical first step would be to compare the careers of newcomers assigned to experienced and less-experienced trainers. In most settings this comparison would be insufficient, however, because assignment of trainers to newcomers could be correlated with certain characteristics of the newcomers. A fortuitous feature of my setting is that

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**Table 1. Descriptive Characteristics of Main Newcomer Sample (N = 510 Women)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
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<tbody>
<tr>
<td>Work experience (years)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Percent married</td>
<td>.371</td>
<td>.483</td>
</tr>
<tr>
<td>Number of children</td>
<td>.392</td>
<td>.697</td>
</tr>
<tr>
<td>Family size</td>
<td>3.075</td>
<td>1.278</td>
</tr>
<tr>
<td>Age</td>
<td>24.18</td>
<td>5.311</td>
</tr>
<tr>
<td>Years of education</td>
<td>7.751</td>
<td>3.268</td>
</tr>
<tr>
<td>Percent from Karnataka</td>
<td>.786</td>
<td>.410</td>
</tr>
<tr>
<td>Percent Hindu</td>
<td>.971</td>
<td>.169</td>
</tr>
<tr>
<td>Percent with A grade on sewing test</td>
<td>.239</td>
<td>.427</td>
</tr>
<tr>
<td>Percent referred to work</td>
<td>.116</td>
<td>.320</td>
</tr>
<tr>
<td>Percent working in jacket lines</td>
<td>.659</td>
<td>.475</td>
</tr>
<tr>
<td>Percent working on assembly operations</td>
<td>.625</td>
<td>.484</td>
</tr>
<tr>
<td>Number of days spent in training</td>
<td>21.51</td>
<td>13.72</td>
</tr>
<tr>
<td>Per day wages (in rupees)</td>
<td>252</td>
<td>0</td>
</tr>
<tr>
<td>Percent assigned to experienced trainers</td>
<td>.425</td>
<td>.495</td>
</tr>
<tr>
<td>Percent from Karnataka assigned to trainer from Karnataka</td>
<td>.524</td>
<td>.499</td>
</tr>
<tr>
<td>Difference in age compared with assigned trainer</td>
<td>10.116</td>
<td>7.607</td>
</tr>
<tr>
<td>Difference in years of education compared with assigned trainer</td>
<td>2.829</td>
<td>3.412</td>
</tr>
<tr>
<td>Percent still working after 1 month</td>
<td>.888</td>
<td>.315</td>
</tr>
<tr>
<td>Percent still working after 3 months</td>
<td>.637</td>
<td>.481</td>
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</table>
Assignment to trainers was as good as random: it depended on the timing of a newcomer’s entry. Newcomers were assigned to trainers by an industrial engineering (IE) manager who worked in the managerial wing of the factory, far from the training room and shop floor, and never met the newcomers. The IE manager kept a running tab of the number of trainees being taught by each trainer; when a newcomer arrived, she was assigned to the trainer with the fewest trainees at the time. Trainers trained an average of seven newcomers per month, but because training was individualized, not conducted in groups, they could have varying numbers of trainees at a given point in time. This method of assignment was thus quasi-random and uncorrelated with newcomers’ characteristics. To verify quantitatively the quasi-random nature of trainer assignment, I conducted basic mean comparisons of the descriptive characteristics of newcomers assigned to experienced and less-experienced trainers to identify any systematic differences. The results appear in table 2. Along most human capital and demographic variables, newcomers assigned to experienced and less-experienced trainers did not differ. Given the absence of a systematic sorting process in trainer assignment, I tested the impact on retention and work readiness of assignment to experienced trainers by comparing the mean career outcomes of newcomers assigned to experienced and less-experienced trainers.

**Dependent variable: Organizational retention.** Using attrition data captured by the firm for the main sample, I measured organizational retention in three ways: (1) the probability of remaining at the firm one month after being

### Table 2. Descriptive Characteristics of Newcomers Assigned to Less-experienced and Experienced Trainers*

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<thead>
<tr>
<th>Variable</th>
<th>Less-experienced trainers (N = 293)</th>
<th>Experienced trainers (N = 217)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent married</td>
<td>.341 (.475)</td>
<td>.410 (.493)</td>
<td>−.069</td>
</tr>
<tr>
<td>Number of children</td>
<td>.362 (.632)</td>
<td>.447 (.775)</td>
<td>−.095</td>
</tr>
<tr>
<td>Family size</td>
<td>2.997 (1.223)</td>
<td>3.180 (1.344)</td>
<td>−.183</td>
</tr>
<tr>
<td>Age</td>
<td>23.77 (4.980)</td>
<td>24.74 (5.691)</td>
<td>−.970*</td>
</tr>
<tr>
<td>Years of education</td>
<td>7.863 (3.275)</td>
<td>7.599 (3.259)</td>
<td>.264</td>
</tr>
<tr>
<td>Percent from Karnataka</td>
<td>.775 (.418)</td>
<td>.802 (.400)</td>
<td>−.027</td>
</tr>
<tr>
<td>Percent Hindu</td>
<td>.973 (.163)</td>
<td>.968 (.177)</td>
<td>.005</td>
</tr>
<tr>
<td>Percent with A grade on sewing</td>
<td>.256 (.437)</td>
<td>.217 (.413)</td>
<td>.039</td>
</tr>
<tr>
<td>Percent referred to work</td>
<td>.116 (.321)</td>
<td>.115 (.320)</td>
<td>.001</td>
</tr>
</tbody>
</table>

* p < .05; **p < .01; ***p < .001.

* Mean coefficients; standard deviations are in parentheses.
hired, (2) the probability of remaining three months post-hire, and (3) the probability of remaining long-term. Most of the analyses reported here use the second measure. I used a three-month cutoff because interviews with trainers, supervisors, and managers revealed a prevailing belief that a newcomer who survived her first three months at the factory would be retained over the long term. This cutoff also allowed me to equalize the comparison of newcomers irrespective of their start dates. Because the start dates of the newcomers in my dataset were distributed over the two-year period between October 2012 and September 2014, I observed their careers for different lengths of time: I observed those who joined in October 2012 for 24 months, but the window was shorter for those who joined in September 2014. To mitigate the effects of such right-censoring of my dependent variable, I used data on attrition between October 2012 and December 2014 and observed each newcomer for three months to determine whether she left during that period.

I constructed my measure for newcomers’ probability of remaining only one month after entering the workforce similarly for the main sample. This measure allowed me to test whether trainer assignment matters immediately after joining the organization. Finally, I used a nonparametric measure of organizational retention, namely a hazard rate measuring survival in the organization over the long term. This measure accounts for the fact that newcomers entered my dataset at different points and allows me to use the full two years of attrition data.

Independent variable: Assignment to experienced trainers. Trainers at the factory differed very little along most observable dimensions other than the duration of their work experience. On that dimension, however, they varied widely. Trainers had between five and 15 years of work experience; the average was 9.6 years (S.D. = 3.3). The median trainer had nine years of work experience; I defined experienced trainers as those whose work experience exceeded the median. Thus experienced trainers had more than nine years of experience, and less-experienced trainers had nine or fewer years. Using this criterion, five of the 11 trainers were experienced. I dichotomized this variable because doing so provided a better model fit than did use of a continuous variable. This decision also facilitated communicating the results of my study, though the results are similar with a continuous trainer-experience variable.

I measured work experience as the total number of years that a trainer had worked in her life. Other measures, such as years as a trainer or years at this factory, yield only minor differences. Similarly, using different thresholds to measure experience, such as being in the top quartile of the experience distribution, does not alter the results significantly.

Control variables. All my analyses controlled for demographic, human capital, and family status characteristics that could affect newcomers’ retention. I

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4 All attrition was voluntary. The firm did not fire any newcomers during the two-year period of my observation.

5 The trainers were all Hindu women; 70 percent were from the state of Karnataka. Their average age was 32, and 90 percent were married. Their families averaged 4 members, including 1.5 children. Trainers reported about 10 years of formal education and earned about Rs. 425 ($8.50) per day. They trained an average of 7 trainees per month; training a newcomer took about 20 days. Trainers had 5, 8, 9, 10, 13, 14, or 15 years of work experience.
controlled for marital status, family size, number of children, age, years of education, home state, and religion. I also controlled for preexisting sewing skills, using newcomers’ scores on “the bag test,” a unique feature of the recruitment process that calls for using a sewing machine to join two identical pieces of cloth on three sides.\(^6\)

In the main analyses of the effect of trainer assignment on retention, I further controlled for features of the workplace and the trainer that could influence retention. I controlled for duration (in days) of training, line assignment (jackets versus trousers), operation assignment (parts versus assembly), and month/year of hiring (because specific early workplace experiences could affect a newcomer’s decision to stay). I also controlled for matches between trainers’ and trainees’ religion, age, and home state, because trainer–trainee homophily could influence retention.

**Mechanism variable: Work readiness.** I measured the work readiness of the survey sample using a scale that draws on my ethnographic observation of non-job-related factors that appear to affect first-time workers’ survival in the workplace and ability to deal with working life. The scale consists of 20 statements, five each about the four key dimensions of work readiness: self-presentation, interpersonal communication, work–life separation, and self-reliance. Respondents rated each statement on a 5-point Likert scale (from strongly disagree to strongly agree).

I developed the scale after determining that no such quantitative scale existed, though the concept of work readiness has appeared in research on U.S. federal training programs. I was encouraged to do so by research suggesting that qualitative exploration of phenomena can be a legitimate and powerful technique in developing quantitative scales (Steckler et al., 1992; Patterson, 2001). To compose the scale, I relied heavily on qualitative analysis, using Atlas.ti, of observational data and interviews with trainees and both experienced and less-experienced trainers. Analysis of the interview data revealed 20 salient aspects of work readiness (such as being able to ask for a bathroom break and knowing how to dress at work) that fell naturally into four broad categories.

The resulting 20-item work-readiness scale incorporated the recommendations of DeVellis (2003) to use simple language and avoid ambiguities. To establish reliability, a research assistant familiar with the aims and objectives of the research reviewed the data, categories, and themes; discussion led to agreement on the final content of the scale. The Cronbach’s alpha for this work-readiness measure was .73. Individual items were scored from 1 to 5; total scores were calculated by averaging the 20 items. Higher scores indicate superior work readiness. The scale appears in table 3; results of a confirmatory factor analysis appear in Online Appendix A (http://journals.sagepub.com/doi/suppl/10.1177/0001839217750868).

**Quantitative Results**

The findings show that assignment to experienced trainers has a large and significant effect on the retention of first-time women workers: it is associated

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\(^6\) Applicants are graded A for good performance, B for average performance, and C for poor performance on the bag test.
with a higher probability of persisting in formal employment after one month, three months, and two years. I also found that work readiness is a key mechanism that underlies the assignment effect: exposure to experienced trainers helps first-time workers become work ready by equipping them with skills essential to survival at work. In keeping with this finding, assignment to experienced trainers is less salient for referred newcomers, who are likely to already be work ready because they have connections with existing workers, and more salient for older women, who are especially lacking in work readiness.

**Assignment to experienced trainers and retention of first-time women workers.** To test hypothesis 1—that when first-time women workers are assigned to experienced trainers, they are more likely to be retained—figures 1 and 2 present basic mean comparisons of newcomers’ probability of retention based on assignment to experienced or less-experienced trainers. Figure 1 shows the effect of trainer assignment on one-month retention. The 95-percent confidence-interval bars around the means indicate that the two groups’ probabilities of retention are statistically different. Figure 1 offers preliminary support for H1 by showing that, for women assigned to experienced trainers, the probability of remaining in formal employment differs from that of counterparts assigned to less-experienced trainers by 10 percentage points.

Figure 2 replicates figure 1 but uses a longer time period, three months. It provides even stronger evidence that trainer assignment affects women’s

### Table 3. Work-readiness Scale*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-presentation at work</strong></td>
<td>I know how to dress for work.</td>
</tr>
<tr>
<td></td>
<td>I present myself confidently at work.</td>
</tr>
<tr>
<td></td>
<td>I am often late to work. (reverse-coded)</td>
</tr>
<tr>
<td></td>
<td>I take responsibility for my tasks at work.</td>
</tr>
<tr>
<td></td>
<td>I am disciplined in meeting my targets each day at work.</td>
</tr>
<tr>
<td><strong>Interpersonal communication</strong></td>
<td>I have made friends at work.</td>
</tr>
<tr>
<td></td>
<td>I am scared of my supervisor at work. (reverse-coded)</td>
</tr>
<tr>
<td></td>
<td>I reply back when I’m spoken to at work.</td>
</tr>
<tr>
<td></td>
<td>I ask questions when in doubt at work.</td>
</tr>
<tr>
<td></td>
<td>I defend myself when I’m criticized without reason at work.</td>
</tr>
<tr>
<td><strong>Work–life separation</strong></td>
<td>I struggle to balance work and home life. (reverse-coded)</td>
</tr>
<tr>
<td></td>
<td>I worry about my children and family while at work. (reverse-coded)</td>
</tr>
<tr>
<td></td>
<td>I am constantly tired at work. (reverse-coded)</td>
</tr>
<tr>
<td></td>
<td>My work routine is stressful. (reverse-coded)</td>
</tr>
<tr>
<td></td>
<td>I miss my family at work. (reverse-coded)</td>
</tr>
<tr>
<td><strong>Self-reliance</strong></td>
<td>I take care of my health at work.</td>
</tr>
<tr>
<td></td>
<td>I skip meals at work. (reverse-coded)</td>
</tr>
<tr>
<td></td>
<td>I drink plenty of water at work.</td>
</tr>
<tr>
<td></td>
<td>I go to the bathroom when I need to at work.</td>
</tr>
<tr>
<td></td>
<td>I seek medical help when I am not feeling well at work.</td>
</tr>
</tbody>
</table>

* 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree. Mean = 3.28; S.D. = .23; alpha = .73.
probability of retention by showing that the effect grows larger over time. Newcomers assigned to less-experienced trainers had a 55-percent probability of retention three months after joining; for similar newcomers assigned to
experienced trainers, the probability of retention was 75 percent. Figure 2 thus offers additional support for H1 by showing that the probability of remaining in formal employment for women assigned to experienced trainers differs from that of counterparts assigned to less-experienced trainers by 20 percentage points.

Figure 3 uses a Kaplan–Meier curve to illustrate the effect of trainer assignment on long-term retention; it analyzes the entire two years of attrition data. The curves show the survival rate to be higher for newcomers assigned to experienced trainers than for those assigned to less-experienced trainers throughout the observation period. After 10 months of tenure, for example, fewer than 30 percent of newcomers assigned to less-experienced trainers remain in formal employment; for those assigned to experienced trainers, the corresponding number is around 50 percent. These results are consistent with the previous models and offer more support for H1.

Table 4 presents OLS models of the analyses testing the effect of training assignment on three-month retention and includes a host of control variables. Though random assignment is a key strength of my study, I included numerous control variables in nested models to determine their effect on retention and to ensure the exogeneity of my main independent variable. All models use individual-level, cross-sectional observations with standard errors clustered by trainer. Model 1 includes only controls for newcomer characteristics; model 2 adds workplace-level control variables; model 3 adds trainer control variables; and model 4 adds the key independent variable of interest, assignment to an experienced trainer.

In models 1, 2, and 3, control variables generally show the expected effects or no effects at all. In model 1, married women are more likely to be retained after three months; older women are less likely to be retained. This finding is
consistent with predictions in the literature that married women entering the workforce will be more committed to formal employment to meet their families’ economic needs (Kabeer, 2002) and that older women will struggle with the physically demanding and low-status nature of garment production (Paul-Majumder and Begum, 2000; Kabeer, 2005). Other controls show no effects. It is noteworthy that the number of children does not have a significant effect on retention, possibly because in India grandparents typically provide childcare.

Model 2 reveals that workplace-level factors such as line and operation assignment are not correlated with retention, which is unsurprising given the standardized nature of work throughout the factory. Similarly model 3 reveals that trainer–trainee match based on home state, age, and education has no effect

<table>
<thead>
<tr>
<th>Variable</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family size</td>
<td>.013</td>
<td>.008</td>
<td>.012</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>(.017)</td>
<td>(.019)</td>
<td>(.021)</td>
<td>(.020)</td>
</tr>
<tr>
<td>Number of children</td>
<td>.031</td>
<td>.015</td>
<td>.013</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>(.022)</td>
<td>(.030)</td>
<td>(.029)</td>
<td>(.026)</td>
</tr>
<tr>
<td>Married</td>
<td>.174***</td>
<td>.219***</td>
<td>.218***</td>
<td>.218***</td>
</tr>
<tr>
<td></td>
<td>(.029)</td>
<td>(.028)</td>
<td>(.028)</td>
<td>(.032)</td>
</tr>
<tr>
<td>Age</td>
<td>−.012*</td>
<td>−.013*</td>
<td>−.019</td>
<td>−.015</td>
</tr>
<tr>
<td></td>
<td>(.005)</td>
<td>(.006)</td>
<td>(.015)</td>
<td>(.010)</td>
</tr>
<tr>
<td>From Karnataka</td>
<td>−.079</td>
<td>−.035</td>
<td>−.019</td>
<td>.074</td>
</tr>
<tr>
<td></td>
<td>(.066)</td>
<td>(.054)</td>
<td>(.084)</td>
<td>(.075)</td>
</tr>
<tr>
<td>Years of education</td>
<td>−.012</td>
<td>−.009</td>
<td>−.019</td>
<td>−.009</td>
</tr>
<tr>
<td></td>
<td>(.066)</td>
<td>(.066)</td>
<td>(.069)</td>
<td>(.032)</td>
</tr>
<tr>
<td>Hindu</td>
<td>.056</td>
<td>.008</td>
<td>.016</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>(.124)</td>
<td>(.117)</td>
<td>(.127)</td>
<td>(.132)</td>
</tr>
<tr>
<td>A grade on sewing test</td>
<td>−.004</td>
<td>−.002</td>
<td>−.004</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>(.040)</td>
<td>(.031)</td>
<td>(.033)</td>
<td>(.035)</td>
</tr>
<tr>
<td>Working in jacket lines</td>
<td>.119</td>
<td>.159</td>
<td>.111</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.082)</td>
<td>(.080)</td>
<td>(.050)</td>
<td></td>
</tr>
<tr>
<td>Working on assembly operations</td>
<td>.008</td>
<td>.016</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.033)</td>
<td>(.036)</td>
<td>(.039)</td>
<td></td>
</tr>
<tr>
<td>Number of days spent in training</td>
<td>.001</td>
<td>.001</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td>(.001)</td>
<td>(.001)</td>
<td></td>
</tr>
<tr>
<td>Trainer, trainee both from Karnataka</td>
<td>−.009</td>
<td>−.146</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.072)</td>
<td>(.090)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trainer–trainee age gap</td>
<td>−.005</td>
<td>−.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.012)</td>
<td>(.005)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trainer–trainee education gap</td>
<td>−.011</td>
<td>−.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.069)</td>
<td>(.033)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced trainer assignment</td>
<td></td>
<td></td>
<td></td>
<td>.244***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(.051)</td>
</tr>
<tr>
<td>Constant</td>
<td>.922**</td>
<td>.802**</td>
<td>1.044**</td>
<td>.910*</td>
</tr>
<tr>
<td></td>
<td>(.208)</td>
<td>(.219)</td>
<td>(.307)</td>
<td>(.377)</td>
</tr>
<tr>
<td>Month/year fixed effects</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>R squared</td>
<td>.050</td>
<td>.126</td>
<td>.131</td>
<td>.169</td>
</tr>
</tbody>
</table>

* p < .05; **p < .01; ***p < .001.
* Standard errors clustered by trainer are in parentheses. One hundred eighty-five workers quit the firm within three months of joining.
on retention. Though homophily could matter in other settings, it matters less here because trainers at this factory are fairly homogenous in most respects other than the duration of their work experience.

Model 4 adds assignment to an experienced trainer as a variable, allowing me to test H1. The variable has a significant impact on three-month retention, and it improves the fit of the model (chi(1) = 21.12, $p < .001$). The coefficient is positive and statistically significant, showing that assignment to experienced trainers increases newcomers' probability of being retained after three months by 24.4 percent. Table 4 thus shows that the effect of assignment to experienced trainers on three-month retention is large, significant, and robust to a wide range of control variables. Table B1 in the Online Appendix replicates these results for one-month retention, and table B2 presents a Cox hazard-rate model estimating the odds that newcomers will leave the organization during the two-year observation period; the table shows a hazard rate that is positive but less than one, indicating the lower likelihood of leaving for workers assigned to experienced trainers. The results presented in both tables are consistent with those discussed here.

Mechanism: Why does trainers’ experience matter? Having shown support for H1, to test H2—that experienced trainers affect the retention of first-time women workers by imparting work-readiness learning—I first directly tested the effect of experienced trainers on the work readiness reported by the survey sample of 50 newcomers. I then explored the effect of experienced trainers on two groups in my main sample, those most and least likely to be work ready. Finally, I ruled out two possible alternative mechanisms—job-related skills and organizational identification—to explain the experienced-trainer effect.

Direct test of mechanism. I measured the mechanism of work readiness using a scale based on ethnographic observation. I used an OLS model to investigate whether work readiness is a key mechanism underlying the assignment effect; table 5 shows results of estimating the effect of assignment to an experienced trainer on newcomers’ work readiness. Again, the table presents nested models: model 1 includes newcomer control variables, and model 2 adds the variable of assignment to an experienced trainer.

Model 1 reveals no statistically significant relationship between newcomers’ characteristics and work readiness. This lack of statistical significance might be a function of the low sample size, though we also have no expectations about the relationship between demographic characteristics and work readiness, given that work readiness is a relatively new concept in the academic literature. Model 2, however, reveals that assignment to experienced trainers has a positive and statistically significant effect on work readiness and improves model fit (chi(1) = 6.03, $p < .01$). Newcomers assigned to experienced trainers attain higher work-readiness scores than those assigned to less-experienced trainers: the difference is .154, which amounts to a 5-percent increase in work readiness among newcomers assigned to experienced trainers. This result offers support for H2.

Heterogeneity in the main assignment effect for subsamples of newcomers. The previous analysis suggests that work readiness could be an important mechanism by which experienced trainers influence newcomers’ retention. An
additional test of this mechanism would be to measure the effect of experienced trainers on the newcomers most and least likely to be work ready. I tested the effect of trainer assignment on two such groups: first-time workers referred by existing employees, who were presumably mentored on work readiness by those who referred them; and workers over the age of 30, who, according to interviews with management, have an especially hard time adjusting to the fast-paced environment of garment production.

Table 6 shows results of an OLS model predicting the probability that these two subsamples of newcomers will remain in formal employment after three months. Model 1 includes only newcomer controls; model 2 adds the experienced-trainer assignment variable; model 3 adds a variable interacting assignment to an experienced trainer with referral to the firm; and model 4 adds a variable interacting assignment to an experienced trainer with being over 30. Thus models 3 and 4 explore how the main positive and significant effect of assignment to experienced trainers differs for referred newcomers and older newcomers, respectively.

The results in models 1 and 2 mimic those presented in table 4. Importantly, the interaction terms in models 3 and 4 are both large and statistically significant. In model 3 the coefficient for assignment to an experienced trainer is .233, but when this variable is interacted with the referral variable, the coefficient is –.246, suggesting that although experienced trainers have a large and...
positive effect on the retention of non-referred workers, their impact on referred workers is effectively zero (−.023, \( p = .79 \)). In model 4, the coefficient for the Experienced trainer \( \times \) Older interaction term is .136, suggesting that for workers over the age of 30, the effect of assignment to an experienced trainer is especially salient (−.307, \( p < .01 \)). Thus Table 6 suggests that the effect of an experienced trainer is much smaller for newcomers likely to already be work ready and much larger for those less likely to be work ready. These results reinforce confidence that work readiness underlies the effect of experienced trainers on retention, providing further support for H2.

### Ruling out alternative mechanisms

Finally, I tested two alternative mechanisms that could underlie the effect of experienced trainers: that experienced trainers impart job-related skills or inculcate organizational identification in their newcomers, which could affect newcomer retention. The training literature designates both mechanisms as important functions of training programs (Mincer, 1962; Osterman, 1987); the socialization literature identifies them as important learning domains (Ashforth, Sluss, and Harrison, 2007). But neither finds support in my qualitative data. To test these mechanisms quantitatively, I

<table>
<thead>
<tr>
<th>Variable</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family size</td>
<td>.012</td>
<td>.008</td>
<td>.009</td>
<td>.010</td>
</tr>
<tr>
<td>Number of children</td>
<td>.031</td>
<td>.033</td>
<td>.031</td>
<td>.026</td>
</tr>
<tr>
<td>Married</td>
<td>.175***</td>
<td>.163***</td>
<td>.158***</td>
<td>.173***</td>
</tr>
<tr>
<td>Age</td>
<td>−.012*</td>
<td>−.013*</td>
<td>−.013*</td>
<td>−.017**</td>
</tr>
<tr>
<td>From Karnataka</td>
<td>−.083</td>
<td>−.088</td>
<td>−.086</td>
<td>−.086</td>
</tr>
<tr>
<td>Years of education</td>
<td>−.012</td>
<td>−.012</td>
<td>−.014*</td>
<td>−.012</td>
</tr>
<tr>
<td>Hindu</td>
<td>.059</td>
<td>.071</td>
<td>.079</td>
<td>.074</td>
</tr>
<tr>
<td>A grade on sewing test</td>
<td>−.001</td>
<td>.009</td>
<td>.006</td>
<td>.007</td>
</tr>
<tr>
<td>Referred to work</td>
<td>.046</td>
<td>.048</td>
<td>.150*</td>
<td>.050</td>
</tr>
<tr>
<td>Experienced trainer assignment</td>
<td>.195***</td>
<td>.223***</td>
<td>.172***</td>
<td></td>
</tr>
<tr>
<td>Experienced trainer ( \times ) Referred</td>
<td>−.246*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced trainer ( \times ) Older</td>
<td></td>
<td></td>
<td></td>
<td>.136**</td>
</tr>
<tr>
<td>Constant</td>
<td>.911**</td>
<td>.856**</td>
<td>.848**</td>
<td>.937**</td>
</tr>
<tr>
<td>R squared</td>
<td>.051</td>
<td>.091</td>
<td>.097</td>
<td>.095</td>
</tr>
</tbody>
</table>

\( * p < .05; ** p < .01; *** p < .001. \)

* Standard errors clustered by trainer are in parentheses. Fifty-nine workers in the sample were referred to the firm; the sample consisted of 79 “older” workers over the age of 30 at the time of hire.
measured job-related skills via average daily output after graduating from training, the idea being that more technically skilled newcomers will produce greater output. The firm captures such output data using radio frequency identification tags attached to every garment produced. I measured organizational identification using a standard scale developed by Mael and Ashforth (1992), which I administered to the survey sample. Table B3 in the Online Appendix demonstrates that experienced trainers do not in fact instill more job-related skills or stronger organizational identification in their trainees than less-experienced trainers. Thus these alternative mechanisms are not pertinent in my context.

DISCUSSION

This paper examines the effect of workplace training programs on the retention of first-time workers from groups historically underrepresented in formal employment. Using qualitative data from observations and interviews at a garment factory in India, I hypothesized that training programs can foster retention when they are conducted by experienced trainers who focus on imparting work-readiness learning, defined as non-job-related skills essential to survive at work, including self-presentation, interpersonal communication, work–life separation, and self-reliance. Exploiting the setting’s practice of randomly assigning newcomers to trainers with varying levels of experience, I used quantitative data on 510 first-time women workers to causally estimate the impact of trainer assignment on newcomers’ probability of retention. I found that assignment to experienced trainers increased first-time workers’ probability of retention after three months by about 20 percent. I further investigated the mechanism of work readiness using survey data on a sample of 50 newcomers and found that those assigned to experienced trainers reported feeling 5 percent more work ready than those assigned to less-experienced trainers. I also found, for my main sample, that assignment to experienced trainers had a weaker effect on newcomers referred to the firm, who had likely acquired work readiness from the friends who referred them, and a stronger effect on older workers who typically have more difficulty adjusting to a fast-paced and physically demanding workplace. These findings reinforce confidence in the mechanism of work readiness.

Contributions to Our Understanding of Training to Remediate Inequality

These findings contribute to our understanding of workplace training programs in four ways. First, organizational studies have produced inconsistent findings on the question of whether workplace training programs foster the retention of first-time workers from historically underrepresented groups, adding fuel to the debate on whether training, whether employer- or government-sponsored, is effective at all (LaLonde, 1995; Heckman, LaLonde, and Smith, 1999). Some scholars have argued that workplace training brings first-time workers “up to speed” and thus promotes retention (Holzer and Martinson, 2005). Others have demonstrated that, in practice, training programs are often poorly designed, not meaningfully linked to actual organizational structures, and thus ineffective (Dobbin, 2009). This paper demonstrates that training programs can be effective at retaining such workers under some conditions. Thus the paper urges a
shift of focus from whether training programs facilitate the retention of first-time workers to when and why they are effective.

Second, previous studies have not specified the conditions under which training programs are effective at retaining entrants from historically underrepresented groups. This paper demonstrates that the individual trainer plays an important role in the success of a training program, echoing human resource management scholarship highlighting the importance of “train-the-trainer” initiatives (Hatcher, 1999; Schmidt, 2007). I further demonstrate that experienced trainers affect retention through the content of the training they impart: they inculcate work readiness by focusing on self-presentation, interpersonal communication, work–life separation, and self-reliance in a way that less-experienced counterparts do not. Recognizing that the agents and content of training can affect the retention of first-time workers from groups historically underrepresented in formal employment sharpens classic human capital and internal labor market theories of training (Becker, 1964; Doeringer and Piore, 1971). The paper also highlights that previous studies’ findings of null effects of training might be accounted for by a focus on trainers who imparted only strictly job-related skills.

Third, scholars of inequality have long been interested in the persistently low labor-force participation of groups historically excluded from formal employment (Reskin, 1998, 2001; Yu, 2002; Mandel and Semyonov, 2006; Kossek and Pichler, 2007; Zambrana 2011). Several studies have investigated how organizations can facilitate labor-market entry; for example, scholars have studied the impact of outreach through “diversity fairs” (Rivera, 2012), joint appointments in academia (Smith and Tian, 2016), and referral-based recruitment (Peterson, Saporta, and Seidel, 2000; Fernandez and Fernandez-Mateo, 2006). Less attention has been paid, however, to the problem of early attrition of first-time workers. A sizeable proportion of first-time women workers at the factory I studied drop out within months after entry, suggesting that to understand the labor-force participation of historically underrepresented groups, research needs to focus as much on retention as on entry.

Finally, some gender research has focused specifically on the struggles that women face in sustaining formal employment and has highlighted how women sometimes opt out of the labor market (Stone, 2007; Percheski, 2008). This study suggests that training focused on work-readiness learning might help prevent women workers from opting out. Some elements of work-readiness learning that this study uncovers, such as work–life separation, might be especially relevant for women workers, given that women often bear heavier loads than men in terms of family responsibilities, including caregiving and household labor (Brines, 1994; Bittman and Wajcman, 2000).

Contributions to Our Understanding of Socialization

My findings also contribute in three ways to the socialization literature. First, the literature has largely focused on the context of white-collar work in Western economies (e.g., Fisher, 1986; Ashforth, Sluss, and Harrison, 2007) and is relatively silent on socialization tactics of particular relevance to low-wage work and to the developing world, where socialization might be especially crucial. By focusing on an understudied population of workers, this study demonstrates how socialization operates differently for first-time workers from
a historically underrepresented group while also expanding our theoretical understanding of socialization.

Second, with respect to the agents of socialization, the literature has focused on informal socialization agents, such as peers and supervisors, rather than agents whose explicit formal role is to train newcomers (Louis, Posner, and Powell, 1983; Reichers 1987; Ostroff and Kozlowski, 1992; Morrison, 1993; Saks and Gruman, 2012). This study helps explicate the important effect of formal socialization agents—prevalent in many organizations, such as the many U.S. hospitals that employ nurse-educators—on retention of newcomers. It also points out within-role variation in the effectiveness of socialization agents by demonstrating that experienced female trainers are more successful than less-experienced female trainers at retaining first-time women workers in India. Similar patterns might emerge when exploring other sources of within-role variation, such as when comparing the effectiveness of male versus female socialization agents, for example (Eagly, Karau, and Makhijani, 1995). Thus the paper takes seriously the idea that the particular individuals who implement programs and procedures in firms significantly influence worker outcomes (Castilla, 2011).

Finally, with respect to the content of socialization, existing scholarship has largely focused on the job role and on familiarization with the organization and its norms and culture (Saks and Ashforth, 1997). This study concentrates instead on a distinct kind of learning that I call work readiness. I used qualitative data to delineate the dimensions of work readiness and to develop a work-readiness scale for use in future work. The existing literature has assumed that first-time workers have a basic understanding of how to work in the formal economy; I argue that these skills need to be learned (Willis, 1977; Vallas, 2001). My findings reveal that first-time workers from underrepresented groups lack awareness of how to conduct themselves at work, due to lack of exposure to formal employment. This paper’s focus on a developing country thus highlights a domain of learning that pertains to newcomer socialization more generally.

Limitations and Policy Implications

I conducted this study at a single garment factory in southern India with a sample of first-time, low-wage women workers. For purposes of generalizability, it would be useful to replicate the study globally at various kinds of organizations that employ first-time workers from groups historically underrepresented in formal employment, including organizations that rely less exclusively on first-time workers.

The survey sample that I used to measure work readiness quantitatively consisted of 50 first-time workers who were not part of the original sample of 510 newcomers. Though findings from the main-sample and survey-sample analyses are internally consistent, it would be useful to measure the work readiness of a larger sample of workers and to collect data on their retention; doing so would allow for mediation analyses to overcome issues arising from differences between samples.

These limitations notwithstanding, this study has implications for both public policy and organizational practice. Millions of workers are entering formal employment for the first time as a result of globalization and job creation, and
this study’s findings have the potential to shape policies that will facilitate their retention. At the state level, governments would benefit from creating training programs to facilitate the retention of first-time workers from historically underrepresented groups. For firms that contend with severe attrition among first-time workers, this paper highlights the importance of the first months in determining whether such workers will adjust to formal employment, and additionally draws attention to the design of training and orientation programs. In sum, both the assignment of trainers and the content of training have a decisive impact on whether first-time workers continue to work.

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Supplemental Material
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