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Train Them to Retain Them: Facilitating Organizational Retention of First-Time Women Workers in India

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Abstract

In this paper, I explore when and why workplace training facilitates the retention of first-time workers from historically underrepresented groups in formal employment. I argue that training conducted by experienced socialization agents is effective at preventing such workers from dropping out soon after they are hired. I also argue that experienced socialization agents promote retention of this workforce by inculcating “work-readiness” learning needed to survive at work, concentrating on self-presentation, interpersonal communication, work-life separation and self-reliance. I develop and evaluate this theory using ethnographic, personnel and survey data on a sample of first-time women workers entering a large factory in India, and exploiting exogenous variation in their assignment to trainers with varying levels of experience. This paper contributes to the literature on organizational inequality by demonstrating that workplace training can successfully foster retention of first-time workers from historically underrepresented groups, through the agents delivering the training and content of training. It also contributes to the socialization literature by focusing on an understudied population of workers, thus highlighting the significance of individual socialization agents in training programs and the mechanism of work-readiness learning explicitly imparted in socializing newcomers.

Certain groups in society have been historically underrepresented in the formal labor force, unable to experience the monetary and non-monetary benefits associated with work (Baron and Bielby 1984; Reskin 2003; Epstein 2007). Research suggests that members of these historically underrepresented groups face economic, social and psychological barriers that prevent them from participating in formal employment, such that even when they gain entry into organizations, they often drop out soon after joining (Smith 2005). In the United States, for example, first-time black employees, single mothers and inner-city youth have been shown to quit disproportionately 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 (*New York Times* 2016; ILO 2015; Asian Development Bank 2015). This high early turnover rate negatively impacts the workers themselves, since longer employment tenures have been shown to result in better economic and personal-welfare outcomes (Kabeer 2002). Early turnover also harms employers by imposing recruitment and training costs and by reducing diversity in the workforce (Slichter 1919; Ely and Thomas 2001).

Some scholars of organizational inequality have touted workplace training programs as an important route to retention of first-time workers from groups historically underrepresented in formal employment (Doeringer 1969; Knoke and Kalleberg 1994; Newman and Winston 2016). To the extent that first-time workers have deficient knowledge and skills due to pre-labor market processes, these scholars theorize, workplace training can “bring them up to speed” and enhance their career prospects (Kalev 2009). However, in practice, other scholars suggest that training programs are often implemented as window dressing to inoculate firms against liability rather than to retain workers and are thereby ineffective (Lynch and Black 1998; Kalev, Dobbin and Kelly

2006; Dobbin, Kim and Kalev 2011). Thus, while training programs have been widely adopted, there appears to be little consensus about *when* they are effective, or about the *mechanisms* whereby training facilitates early retention of first-time workers from underrepresented groups. It is imperative to investigate this question so that first-time workers can experience the benefits of sustained employment and organizations can benefit from increased diversity.

The literature on organizational socialization offers an approach to this question. This literature, which investigates the processes that organizations use to socialize newcomers and to help them fit into new social contexts (Ashforth, Harrison and Sluss 2014; Saks and Gruman 2012) 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 (Bauer, Morrison and Callister 1998; Saks and Ashforth 1997). This literature has tended, however, to predominantly study white-collar work in Western economies, where newcomers have been exposed to the norms of formal employment since childhood (Jablin 2001; Ashforth, Harrison and Sluss 2007); thus it cannot speak to the socialization agents and content best suited to first-time workers from groups historically underrepresented in organizations. Therefore, this paper investigates the conditions under which socialization agents facilitate retention of such workers and explores the learning that underlies this process, thus contributing to the literatures on both organizational inequality and socialization.

To investigate this question, I obtained unrestricted access to data from a garment factory in India that hires and trains impoverished women workers, a population that has been historically absent from the workforce (*New York Times* 2015). Adopting a full-cycle research approach (Fine and Elsbach 2000), I first conducted ethnographic fieldwork at the factory. This work produced

two hypotheses about training, socialization and retention; I then tested the hypotheses using unique personnel data on a sample of 510 newcomers over a two-year period, which I supplemented with a detailed survey of a smaller sample of 50 newcomers. A fortuitous feature of my setting, which I exploit to identify causal relationships, is that newcomers to the factory are assigned to trainers who conduct their training and socialization in a quasi-random manner.

Using this data and identification strategy, I uncover two important conditions under which workplace training facilitates the retention of first-time workers from underrepresented groups namely, when it is conducted by experienced socialization agents and second, when it consists of “work-readiness” learning focused on self-presentation, interpersonal communication, work-life separation and self-reliance. This paper contributes to the literature on organizational inequality by demonstrating that contrary to indications from prior research, workplace training can indeed foster retention of first-time workers from historically underrepresented groups, through the agents delivering the training and content of training. It also contributes to the socialization literature by focusing on a relatively understudied population of workers, thus highlighting the importance of individual socialization agents in training programs and an explicit focus on work-readiness learning in socializing newcomers.

In what follows, the paper will review the relevant literature before presenting my qualitative data to develop two main hypotheses. It then describes how I tested these hypotheses with personnel records and survey data, and ends by discussing the implications of this research for theory and practice.

RETENTION OF FIRST-TIME WORKERS FROM HISTORICALLY UNDERREPRESENTED GROUPS

The organizational-inequality literature argues that, in both developed and developing countries, early turnover is high among first-time workers from historically underrepresented groups (Willis 1977; Bielby and Baron 1984; Brinton et al 1995; Zhou and Moen 2001; Alon et al 2001, Reskin 2003, Smith 2005). For example, in the United States, over 60 percent of black employees hired by a technology firm quit within their first year of joining the organization (Petersen et al 2000). Similarly, in India, a quarter of female employees joining call centers leave within forty-five days of starting their job (Ranganathan and Kuruvilla 2008). Given the extent of such turnover, and the costs imposed on employers and workers alike (Slichter 1919; Bielby and Baron 1984), it is imperative to investigate how organizations can foster retention of such workers. In particular, because these workers quit soon after joining, investigating the organizational processes that newcomers encounter early in their organizational careers could be fruitful: one such practice is workplace training.

Impact of Workplace Training Programs

Scholars of inequality have argued that growing employment needs can encourage employers to reduce hiring standards, recruit first-time workers from historically underrepresented groups and provide training to raise such workers' productivity (Doeringer 1969; Osterman 1995; Cappelli et al 1997). Accordingly, since the 1960s businesses have recruited from underrepresented communities and expanded their formal and informal training programs (Doeringer 1969). In 1974, for example, Kaiser Aluminum signed a contract with United Steelworkers to provide new training programs that would make skilled craft jobs available to black workers (Kalev 2009). Job training programs teach first-time workers the skills required to perform their jobs (Kalev 2009;

Holzer and Martinson 2005; Newman and Winston 2016), and typically consist of a mix of formal technical education and informal coaching by workplace supervisors (Doeringer 1969).¹

Some scholars have theorized that such organizational training programs have the potential to reduce poverty and inequality by retaining newcomers from minority communities in the workplace (Kalleberg and Sorenson 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 helps them sustain employment (Doeringer 1969; Newman and Winston 2016). Further, training provided by employers allows workers to earn an income while improving their human capital, which motivates them to stay with the organization longer (Gritz 1993, Lynch 1992; Holzer 2001).

In practice, however, other scholars argue that 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 suggest that training programs are often not adopted by executives trying to seek efficient solutions to the problem of early turnover, but rather are adopted as a ceremonial gesture to reduce legal risk, thus playing a merely symbolic role in organizations (Kalev, Dobbin and Kelly 2006, Dobbin and Kelly 2007, Dobbin et al 2011, Dobbin et al 2015). Further, training programs are often poorly designed and not meaningfully linked to organizational structures and practices leading to no discernible effect on retention of first-time underrepresented workers (Tomaskovic-Devey and Skaggs 2002, Knoke and Kalleberg 1996, Kalev 2009).

¹ Some research has also investigated the role of government-sponsored training programs in encouraging first-time workers from historically underrepresented communities to join the workforce (Doeringer 1969). Evidence is mixed on whether such public programs are effective (Martinson and Strawn 2003; Heckman et al 1999; LaLonde 1995; MDRC 2001).

Given this lack of consensus about when and why workplace training can facilitate organizational retention, I turn to the literature on organizational socialization that has long studied training and socialization programs in white-collar settings in Western economies. In particular, I discovered two concepts that have thus far been absent from the inequality literature's analysis of training: the socialization agents who deliver training and the content of that training.

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 been the focus of considerable social science research (for reviews, see Ashforth, Harrison and Sluss, 2014; Saks and Gruman 2012). 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., Bauer et al 2007; Saks and Ashforth 1997; Allen 2006). Further, this research has linked various forms of socialization to specific adjustment variables, ranging from attitudes and behaviors to outcomes such as satisfaction and turnover (e.g., Van Maanen and Schein 1979; Bauer et al 1998).

In particular, scholars have noted that insiders in organizations, such as peers and supervisors, play a central role in socialization processes by acting as socialization agents (Reichers 1987; Bauer, Morrison and Callister 1998; Kram 1988, Ramarajan and Reid 2016). Some organizations create formal roles (such as trainer or mentor) for socialization agents; elsewhere the role of socialization agents is informal (Saks and Gruman 2012; Sluss and Thompson 2012). Agents typically facilitate socialization by providing newcomers with advice, job instructions and social support (Louis, Posner and Powell 1983). Comparisons of socialization agents in different roles have found 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 while co-worker agents provide more group-specific and social information (Ostroff and Kozlowski 1992). However, “the emphasis has been on coworkers and supervisors” (Saks and Gruman 2012:42) and less attention has been paid to formal socialization agents and in particular, to individual differences among formal agents enacting the same role and how these differences could affect socialization 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). Indeed, multiple typologies of socialization content have been proposed and tested (Chao et al 1994; Ostroff and Kozlowski 1992; Taormina 1994; Morrison 1993, 1995). These typologies agree that learning mostly entails familiarization with (1) the job role and (2) the nature of the organization. However, scholars have called for more research on “specific learning domains” that might be relevant in particular contexts or among particular populations of workers (Ashforth et al 2007: 20).

Overall, socialization research has predominantly studied white-collar work in Western economies (Bauer et al 1998; Saks and Ashforth 1997). Fisher (1986: 105) observed that this research has “tended to concentrate in the same few occupations” using well-educated white-collar samples, ignoring a broader range of workers and occupations. Ashforth and colleagues (2007: 53) also noted that “we know relatively little about socialization in international contexts.” Importantly, white-collar workers in Western economies have been exposed to workplace and

occupational norms even before they enter the workforce by their families, educational institutions and by the media (Jablin 2011).

In this paper, I study the impact of training and socialization on worker retention in an organization that hires first-time workers from a historically underrepresented group. I investigate the conditions under which socialization agents effectively foster early retention, and I explore the specific newcomer learning that underlies this process. I thus contribute to our understanding of both organizational inequality and socialization. Before stating my theory and hypotheses (developed through my qualitative data), I describe my setting for this study.

THE SETTING: AN INDIAN GARMENT FACTORY EMPLOYING FIRST-TIME WOMEN WORKERS

In India, women have historically had limited employment opportunities and have thus been underrepresented in the labor market (*New York Times* 2015). However, over the past decade, a new wave of garment manufacturing units have begun offering employment to several rural women entering the labor force for the first time (*New York Times* 2016). I obtained access to one such large garment manufacturing factory in the Indian state of Karnataka. The employed women, who typically come from impoverished circumstances and have little prior exposure to formal employment, can earn a stable income for the first time in their lives and help support their households. As such, daily, five to ten women with no prior work experience “walk-in” to the factory seeking employment as entry-level sewing operators.

Table 1 presents descriptive statistics on these first-time women workers. It is striking that 46 percent of the newcomers left the factory within three months and 12 percent left after only one month. Thus, numerous women are clearly unable to sustain their employment, despite wanting to work and recognizing the benefits of regular employment. Given that one of the first

organizational programs that the factory offers these women is training, this paper explores key features of the training program and investigates how it impacts early retention of first-time women workers.

INSERT TABLE 1 ABOUT HERE

The Training Program

Newcomers enter a training program after they are hired to learn a specific garment operation. The program is individualized; that is, 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 in; it is there, on the production line, that training is conducted. 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.²

On average, training lasts about three weeks. Newcomers first learn how to operate a sewing machine; once familiar with basic machine controls, they are taught a specific operation such as stitching a shirt collar. They then practice their operation on several “mock pieces,” first to execute it at a desired level of quality and later 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 graduate and are deployed on the production line. The next section describes the research methodologies I used to investigate the impact of the training program on early retention of first-time women workers at the factory.

Research Design

I adopted a full-cycle research approach, which combines inductive and deductive methodologies

² Because training is not conducted in a classroom or in groups, peer or cohort effects are minimal.

(Fine and Elsbach, 2000; Cialdini, 1980). I first conducted ethnographical fieldwork and interviews at the garment factory, which generated my theory and hypotheses. I then tested my hypotheses using unique personnel data on the training and attrition outcomes of individual workers and a hand-collected survey.

Qualitative Methods

The ethnographic observation I conducted with two research assistants, from June 2014 until June 2015 produced over 200 single-spaced pages of fieldnotes about the training process. I also conducted 45 in-depth interviews with all eleven trainers and subsamples of newcomers, supervisors, industrial engineers and human resource managers at this factory. Observation focused on newcomers' experiences from the time they first "walked-in" to the factory, through the recruitment and training processes, until they were deployed on the lines. The focus of the interviews was to understand the stresses that newcomers faced at the workplace, their conflicts over whether to remain at the factory or to quit, and individual trainers' approaches to training. I also conducted five "home visits" to newcomers in their villages, on holidays and/or on weekends, to better understand their home lives and meet their families.

I analyzed this qualitative data inductively, using Atlas.ti (Glaser and Strauss 1967; Strauss and Corbin 1990). Analysis consisted of multiple readings of field and interview notes, composition of analytical memos, and the tracking of patterned activities and issues over time.

QUALITATIVE FINDINGS AND HYPOTHESIS DEVELOPMENT: THE AGENTS AND CONTENT OF TRAINING

Heterogeneity among Trainers

I began my fieldwork by observing and interacting with prospective first-time women workers when they entered 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.”³ My description of an effort to converse with one 24-year-old first-time worker, for example, notes that “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.” According to the hiring manager, “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, however, some but not all of the women exhibited a dramatic transformation in self-confidence. For example, a month after I first met her, the same 24-year old called out to me from across the shopfloor, “Hi, Akka (big sister), have you eaten breakfast yet?” This time, she looked right at me, and her body language indicated that she was self-assured. But this kind of transformation was not uniform; 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 also revealed that, indeed, many first-time workers quit less than three months after joining; these dropouts seemed disproportionately to be those who remained “scared, timid and hesitant when answering questions.” For example, 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 women workers persisted and others did not, I interviewed several managers and veteran workers, who emphasized the important effect of training and trainers, in particular, on retention. “The trainer has the important task of preparing

³ Any quotations in this section that aren’t attributed to specific informants are from my fieldnotes.

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. He continued, “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 shopfloor was that “the experienced ones are better.” One worker listed the experienced trainers and commented, “These trainers are very good. All the workers love them.”

Training was conducted by eleven trainers, all former line employees on the shopfloor who had been promoted to the role of trainer by management after demonstrating exceptional skill at a wide range of garment operations. The trainers varied, however, in the length of their work experience, and I observed that the pedagogical approach of experienced trainers, who had been in the workforce for many years, differed strikingly from that of their less-experienced counterparts. Individual trainers had considerable autonomy; they were free to interpret training protocols and manuals as they saw fit. Thus the training experiences of women assigned to experienced trainers varied markedly. About half of the first-time women workers I was observing were assigned to experienced trainers: these newcomers seemed to emerge from training better adjusted and they stayed at the factory longer.

While the literature on organizational inequality has paid scant attention to the question of how different trainers might affect worker retention, the socialization literature has theorized about individuals responsible for training in organizations, calling them socialization agents, and has further shown that these agents play an important role in newcomer adjustment (Saks and Gruman 2012, Bauer et al 1998). However, going beyond this literature, my field data suggest not only that formal socialization agents responsible for training play a central role in socialization but also that individual socialization agents, with varying levels of experience, might enact the same role

differently thereby affecting worker retention. Building on this field observation along with the socialization literature, I hypothesize:

Hypothesis 1: When first-time workers from historically underrepresented groups are assigned to experienced socialization agents, they exhibit higher rates of retention.

Work-Readiness Learning

Having observed newcomers assigned to experienced versus less experienced trainers, I was intrigued by how experienced trainers fostered newcomer retention. My observation revealed important differences in the content of the training provided by experienced and less-experienced trainers. Less-experienced trainers focused predominantly 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 described work-readiness as acquiring “the right mindset to deal with work so that [workers] don’t break down at every slight thing.” Another experienced trainer 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: self-presentation, interpersonal communication, work-life separation and self-reliance. A focus on these four elements that could affect newcomer retention distinguished the training approaches of experienced trainers from those of less-experienced counterparts.

Self-Presentation. I observed, first, that experienced trainers offered advice to newcomers, in a way that less-experienced trainers did not, on how to present themselves at work. This wide-ranging advice covered “what to wear to work” and how to “smile, be cheerful and appear confident” that might sound familiar, but also included topics associated with fundamentally learning to work (irrespective of organizational context) such as the notion of time-discipline. With respect to time-discipline, for example, an 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.” The value of such advice to adjusting to working life at the factory was corroborated in my interviews with newcomers. One new employee assigned to an experienced trainer, described how initially 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 admonishment at the factory gate for being late, until her trainer helped her systematically plan her morning commute. In contrast, a newcomer assigned to a less-experienced trainer said “no one has advised me on this issue and to this day, I’m always late.”

Interpersonal Communication. Experienced trainers also taught interpersonal communication skills. These skills similarly extended beyond learning the norms of communication in this factory to fundamentally learning how to approach and talk to strangers. All trainers, whether 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.” Thus experienced trainers used multiple strategies to get newcomers to “open up.” One experienced trainer explained, “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 explicitly introducing her trainee to other workers on the line, and encouraging her to “make friends.” Less-experienced trainers, by contrast, asserted that whether or not trainees acquired such interpersonal skills “depended on [their] nature,” and that “some automatically pick it up while others don’t.”

Work-Life Separation. Third, I observed that experienced trainers continually advised their trainees to strike a balance between their home and work lives. One experienced trainer

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.” As a result, 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.” On the other hand, 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 unaware of] even the basics [of] how to eat [in public] or go to the bathroom.” Furthermore, she added, “Work pressure is something completely new to the employee,” which causes them to neglect to take care of themselves even more. Thus, experienced trainers 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.” Many newcomers assigned to experienced trainers had, in the words of one trainer, “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 limited attention to such training content (Dobbin and Kalev 2016); the socialization literature has emphasized the importance of socialization content but has focused predominantly on learning spanning the job role and the broader organization, given its focus on white collar workers in Western economies where newcomers are more likely to understand the basics of work-readiness (Ashforth et al 2007). My field data uncover work readiness as an under-theorized socialization content area and further delineate four dimensions of work readiness. Building on this in-depth qualitative data and supported by the socialization literature, I hypothesize:

Hypothesis 2: Experienced socialization agents foster organization retention of first-time workers from underrepresented groups 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 next collected quantitative data on the training and work experiences of a sample of first-time women workers to test these hypotheses.

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, and survey data on a survey sample of 50 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' baseline characteristics*, such as age and

educational level; specific information from *training records*, such as trainer assignment and length of training; and *workplace outcomes*, such as daily output and attrition.

Having identified the mechanism of work-readiness via fieldwork, I wanted to also test quantitatively whether experienced trainers imparted superior work-readiness to their trainees. Absent personnel data on this novel mechanism, I surveyed 50 newcomers who graduated from training and entered the lines in January–February 2015. The detailed 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.

Dependent Variable: Organizational Retention

Using attrition data⁴ captured by the firm for the main sample, I measured organizational retention in three ways: (a) the probability of remaining at the firm three months after entering the workforce, (b) the probability of remaining one month after entering, and (c) the probability of remaining long-term. Most of the analyses reported here use the first measure. I used a three-month cutoff because interviews with trainers, supervisors and managers revealed a prevailing belief that a newcomer who could survive her first three months at the factory would be retained over the long term. This cutoff also allowed me to equalize comparison of newcomers irrespective of their start dates. Because the newcomers in my dataset had start dates distributed over the two-year period between October 2012 and September 2014, I observed their careers for different lengths of time. I observed retention of newcomers who entered the factory in October 2012 for 24 months but the window was shorter for those who entered the factory in September 2014. To mitigate the effects of such right-censoring of my dependent variable, I used data on attrition between October

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

2012 and December 2014 and observed each newcomer for three months after she joined the firm to determine whether she left during that period.

I constructed my second measure—newcomers' probability of remaining at the firm 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 non-parametric 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.⁵ On that dimension, however, they varied widely. Trainers had on average 9.6 years of work experience [standard deviation = 3.3]. The median trainer had 9 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 work experience, and less-experienced trainers had nine or fewer years of work experience. Using this criterion, five of the eleven trainers were experienced. I dichotomized this variable because doing so provided a better model fit for variance in worker retention 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.

In this study, I measure work experience as total number of years that a trainer had worked in their life. Other measures, such as number of years worked as a trainer or number of years

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.

worked 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 did not alter the results significantly.

Control Variables

All my analyses controlled for the demographic, human-capital and family-status characteristics that could affect newcomers' retention. In particular, I controlled for marital status, family size, number of children, age, years of education, home state and religion. I also controlled for newcomers' pre-existing sewing skills, using their 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 investigating the effect of trainer assignment on newcomer retention, I further controlled for features of the workplace and the trainer that could influence retention. With respect to workplace characteristics, 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 the trainers' and trainees' religion, age and home state, since trainer-trainee homophily could also influence retention.

Mechanism Variable: Work-Readiness

I measure work-readiness using a scale that draws on ethnographic observation of non-job-related factors that appeared to affect first-time workers' survival in the workplace and ability to deal with working life. The scale consists of twenty statements, five each about the four key dimensions of

⁶ Applicants are graded A for good performance, B for medium performance and C for poor performance on the bag test.

work-readiness: self-presentation, interpersonal communication, work-life separation and self-reliance. Respondents rated each statement on a five-point Likert scale (from Strongly Disagree to Strongly Agree).

I developed a scale to measure work-readiness after determining that no such quantitative scales existed, though the concept appears in some research on U.S. federal training programs. I was encouraged to do so by research suggesting that qualitative exploration of phenomena is increasingly seen as a legitimate and powerful technique in the development of quantitative scales (Steckler, Kenneth, Goodman, Bird, & McCormick, 1992; Patterson, 2001). To compose the scale, I relied heavily on qualitative data analysis, conducted using Atlas.ti, of observational data and interviews with trainees and both experienced and less experienced trainers. Analysis of the interview data revealed twenty salient aspects of work-readiness (such as being able to ask for a bathroom break, knowing how to dress at work and the like) that fell naturally into four broad groups.

The resulting twenty-item work-readiness scale incorporated the recommendations of DeVellis (2003) to use simple language, 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 0.73. Individual items were scored from 1 to 5; total scores were derived by averaging the twenty items. Higher scores indicate superior work-readiness. The scale and the results of a confirmatory factor analysis of the scale appear in Appendix A.

IDENTIFICATION STRATEGY AND METHODS

To test the effect of assignment to experienced trainers on newcomers' work-readiness and retention, a typical first step would be to compare the careers of newcomers assigned to

experienced trainers to those of counterparts assigned to 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. For example, if unskilled newcomers were systematically assigned to experienced trainers, it would be difficult to determine whether their retention resulted from their trainer assignment or their initial skill level to distinguish the effect of their trainer assignment from that of their initial skill level.

However, a unique and fortuitous feature of my setting is that assignment to trainers was as-good-as-random; it depended on the timing of the 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, the IE manager assigned her to the trainer with the fewest trainees at the time. All 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 any 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 trainers and less experienced trainers did not differ. Those assigned to experienced trainers appear to be slightly older, but this difference could be attributable to chance. The development-economics literature demonstrates that when two random groups are compared across enough

variables, they may differ statistically on a single variable simply by chance (Duflo et al., 2007). In any case, I explicitly control for age along with other pre-hire variables in regressions.

INSERT TABLE 2 ABOUT HERE

Given that the quantitative data on pre-hire characteristics do not point to a systematic sorting process in trainer assignment, I test 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.

Methods

The natural experiment that characterizes my setting allowed for the use of simple cross-sectional models to test my two main hypotheses. First, to test Hypothesis 1, I estimate the impact of assignment to experienced trainers on newcomers' likelihood of retention in the organization using the main sample. I use OLS models predicting newcomer retention, allowing me to account for error structures robust to a group-level covariance. Standard errors in all models are clustered by trainer; this allows for potential correlation in the error terms within trainers and uses repeated observations of newcomers with the same trainers to estimate standard errors robust to this problem (Angrist and Pischke 2008). Results are robust to the use of logit or probit models instead. Second, to test Hypothesis 2, I similarly use an OLS model with standard errors clustered by trainer to estimate the impact of experienced trainer assignment on newcomer work-readiness, now using the survey sample. I use this approach rather than adding the work-readiness variable to the main regression presented in Table 3 because data for this mechanism is unavailable for the 510 newcomers in my main dataset.

Demographically, the survey sample did not differ from the main sample when considering newcomers who joined the factory during the same two-month period. However,

workers' demographic characteristics are subject to seasonal effects; thus, the survey sample was more likely to be married and to have children than the main sample of 510 workers who had joined over a two-year period. Given these differences, I control for a host of demographic variables, including marital status and number of children, in all my models, and include fixed effects for every month/year combination between October 2012 and September 2014 in my main analyses. For a discussion of the implications of possible differences between the survey sample and the main sample, see the Limitations section.

RESULTS

The findings show that assignment to experienced trainers has a large and significant effect on retention of first-time women workers. Assignment to experienced trainers is associated with a higher probability of persisting in formal employment after one month, three months and two years. I also find support for the thesis that work-readiness is the mechanism that underlies the assignment effect: exposure to experienced trainers helps first-time workers become work-ready by enabling them to acquire skills essential to survival at work. In keeping with this finding, I further find that assignment to experienced trainers is less salient for referred newcomers likely to already be work-ready, and more salient for older women especially lacking in work-readiness.

Assignment to Experienced Trainers and Retention of First-Time Women Workers

This section tests Hypothesis 1 that when first-time workers from historically underrepresented groups are assigned to experienced socialization agents, they have higher rates of organizational retention.

Figures 1 and 2 first present basic mean comparisons of newcomers' probability of retention after three months and after one month, based on assignment to experienced or less-experienced trainers. Figure 1 shows the effect of trainer assignment on three-month retention.

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 in the same time period was 75 percent. The figure also includes confidence interval bars around the means, which indicates that these probabilities of organizational retention across the two groups of newcomers are statistically different from one another. Figure 1 offers preliminary support for Hypothesis 1 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.

INSERT FIGURE 1 ABOUT HERE

Figure 2 replicates Figure 1 but uses the more restricted time period of one month. It provides additional evidence that trainer assignment impacted women's transition into formal employment even in this shorter time frame.

INSERT FIGURE 2 ABOUT HERE

Figure 3 then presents a Kaplan Meier curve for the effect of trainer assignment on long-term retention, analyzing the entire two years of attrition data while taking into account that newcomers enter the dataset at different times. I evaluate the survival function of remaining in the organization for first-time women workers by trainer assignment. The curves show that the survival rate is 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, less 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 additional support for Hypothesis 1.

INSERT FIGURE 3 ABOUT HERE

Table 3 finally presents least-squares models of the same analyses testing the effect of training assignment on three-month retention including a host of control variables. Though random assignment is a key strength of my study, I include 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. The sequence of models is as follows: Model 1 includes only newcomer-characteristics control variables; 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.

INSERT TABLE 3 ABOUT HERE

In Models 1, 2 and 3, control variables generally show the expected effects or no effects at all. With respect to the newcomer control variables in Model 1, married women are more likely to be retained after three months; older women and more educated women are less likely to be retained. This finding is consistent with predictions in the literature that married women entering the workforce might be more committed to formal employment to meet their families' economic needs (Kabeer, 2002), and that older and more educated women might struggle with the physically demanding and low-status nature of garment production (Paul, Majumder and Begum, 2000; Kabeer, 2005). Other newcomer controls show no effects. It is noteworthy that the number of children does not have a significant effect on retention, possibly because the joint family structures prevalent in India enable grandparents to provide child care. In Model 2, such workplace-level factors as line and operation assignment are not correlated with retention, which is unsurprising given the standardized nature of work throughout the factory. Similarly, in Model

3, trainer–trainee match based on home state, age and education has no effect on retention: though such homophily could be important in other settings, these variables may not correlate with retention at this factory because trainers are fairly homogenous along most dimensions other than the duration of their work experience.

Model 4 adds assignment to an experienced trainer as a variable, allowing us to test Hypothesis 1. We see that the variable has a significant impact on three-month retention, and that it improves the fit of the model ($\chi(1) = 21.12, p < 0.001$). Note that the coefficient is positive and statistically significant, showing that assignment to experienced trainers increases newcomers' probability of being retained in three months by 24.4 percent. Table 3 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 Appendix replicates these results for one-month retention. Table B2 in the Appendix presents a Cox Hazard Rate model estimating the odds that newcomers will leave the organization during the two-year observation period. The results presented in both tables are consistent with those discussed above.

Having shown support for Hypothesis 1, the next section of the paper seeks to test Hypothesis 2 that experienced socialization agents affect organizational retention of first-time workers from historically underrepresented groups by imparting work-readiness learning.

Mechanism: Why Does Trainers' Experience Matter?

To test Hypothesis 2, I first directly tested the effect of experienced trainer assignment on work-readiness reported by my survey sample of 50 newcomers. I then explored the effect of experienced trainer assignment on the retention of two newcomers groups in my main sample who were most and least likely to be work-ready to determine how the effect of trainer assignment varied for these two groups. I finally rule out two alternative mechanisms – job related skills and organizational

identification – underlying the experienced trainer assignment effect.

Direct Test of Mechanisms. As described earlier, I measured the mechanism of work-readiness using a scale based on ethnographic observation. In order to investigate whether work-readiness is a key mechanism underlying the assignment effect, Table 4 fits a least-squares model to estimate the effect of assignment to an experienced trainer on newcomers' work-readiness. Again, I present nested models: Model 1 includes newcomer control variables and Model 2 adds the variable of assignment to an experienced trainer.

INSERT TABLE 4 ABOUT HERE

Model 1 reveals no statistically significant relationship between newcomer characteristics and work-readiness. Though we have no priors about the relationship between demographic variables and work-readiness, given that work-readiness is a relatively new concept in the academic literature, the lack of a significant effect in Model 1 might also be a function of the low sample size. Model 2, however, reveals that assignment to experienced trainers has a positive and statistically significant effect on work-readiness and improves model fit ($\chi(1) = 6.03, p < 0.01$). In particular, as Model 2 shows, newcomers assigned to experienced trainers attain higher work-readiness scores than do counterparts assigned to less experienced trainers: the difference in scores is 0.154, which amounts to a 5 percent increase in work-readiness among newcomers assigned to experienced trainers. This result offers support for Hypothesis 2 by demonstrating that assignment to experienced trainers results in greater work-readiness among first-time women workers.

Heterogeneity in the Main Assignment Effect for Subsamples of Newcomers. The previous analysis suggests that work-readiness could be an important mechanism through which experienced trainers impact newcomers' retention. An additional test of this mechanism would

be to measure the effect of assignment to experienced trainers on the groups of newcomers who are most and least likely to be work-ready. In particular, 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 the employees who referred them; and workers over the age of 30, who, according to interviews with management, have difficulty adjusting to the fast-paced environment of garment production.

Table 5 fits a least-squares model predicting the probability that these two subsamples of newcomers will remain in formal employment for three months. The sequence of models is as follows: 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 relatively older (age 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.

INSERT TABLE 5 ABOUT HERE

The results in Models 1 and 2 mimic those presented in Table 3. Importantly, the interaction terms in Models 3 and 4 are both large and statistically significant. In particular, in Model 3 the coefficient for assignment to an experienced trainer is 0.233 but when this variable is interacted with the referral variable, the coefficient is -0.246. This result suggests that, though experienced trainers have a large and positive effect on retention of non-referred workers, their impact on referred workers is very close to zero. In Model 4, the coefficient for the Experienced Trainer * Older interaction term is 0.136, suggesting that for workers over the age of 30 the effect of assignment to an experienced trainer is especially salient. Overall, Table 5 suggests that the

effect of assignment to an experienced trainer is much smaller for newcomers likely to already be work-ready, namely those referred to the firm, and much larger for those less likely to be work-ready, namely older workers. These results reinforce confidence that work-readiness is a mechanism that underlies the effect of experienced trainers on retention, thus providing further support for Hypothesis 2.

Ruling out Alternative Mechanisms. Finally, I test two alternative mechanisms underlying the experienced trainer assignment effect, namely that experienced trainers impart job-related skills or inculcate organizational identification in their newcomers, which could affect newcomer retention. These two mechanisms are emphasized in the literature as being important learning domains that are taught in socialization (Ashforth et al 2007). I measure job-related skills through newcomers' average daily output produced after graduating from training with the idea that the more technically skilled a newcomer is, the higher her output would be. This unique output data is captured by the firm using RFID technology. I measure organizational identification using a standard scale developed by Mael and Ashforth (1992) that was administered to the survey sample. However, Table B3 in the Appendix demonstrates that experienced trainers do not instill more job related skills or organizational identification in their trainees than less-experienced trainers, thus taking these alternative mechanisms off the table in my context.

CONCLUSION

This paper examines the effect of workplace training programs on 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 conducted by experienced socialization agents who focus on imparting

work-readiness learning, defined as the 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 of varying experience levels, I used quantitative data on 510 first-time women workers to causally estimate the impact of trainer assignment on the newcomers' probability of retention. I found that assignment to experienced trainers increased the first-time workers' probability of retention after three months by 20 percent. I further investigated the mechanism of work-readiness using survey data on a smaller sample of 50 newcomers. I found that newcomers 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 probably 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, thus reinforcing confidence in the mechanism of work-readiness.

Contributions to Organizational-Inequality Literature

These findings contribute to our understanding of organizational inequality in three ways. First, prior studies produced inconsistent findings on the question of whether training programs foster retention of first-time workers from historically underrepresented groups. Some scholars theorized that workplace training brings such workers "up to speed" and thereby promotes retention (Doeringer 1969, Holzer and Martinson 2005). In practice, other scholars demonstrated that training programs are often adopted as window dressing to inoculate firms against liability and are thereby ineffective (Kalev 2009, Kalev, Dobbin and Kelly 2006). This paper demonstrates that training programs can indeed be effective at retaining such workers under some conditions. In this

way, the paper urges the literature to move beyond investigating *whether* training programs facilitate retention of first-time underrepresented workers to investigating *when* they are effective and *why*.

Second, previous studies, by focusing narrowly on the question of whether training programs are effective, have not specified the conditions under which they are effective for retaining labor force entrants from historically underrepresented groups (Paluck and Green 2009, Dobbin and Kalev 2008). Building on the socialization literature, this paper demonstrates that the individual trainer plays an important role in the success of a training program: when first-time workers from historically underrepresented groups are assigned to experienced trainers, they are more likely to be retained. The paper also demonstrates that experienced trainers impact retention through the content of their training. In particular, they inculcate work-readiness in their trainees by focusing on self-presentation, interpersonal communication, work-life separation and self-reliance in their training, in a way that their less experienced counterparts do not. For trainees with limited exposure to formal employment, such work-readiness training is critical to their adjustment to work. Thus, the paper shows how the agents and content of training can affect retention of first-time workers from groups historically underrepresented in formal employment. It also helps explain the divergent findings in previous scholarship by suggesting that the studies reporting null effects of training might have had less experienced trainers focusing narrowly on job-related skills in the training.

Finally, scholars of inequality have long been interested in the persistently low labor force participation of groups historically excluded from formal employment (Reskin 1998, 2001, Kossek and Pichler 2007, Mandel and Semyonov 2006, Yu 2002, Zambrana 2011). Several studies have investigated how organizations can facilitate labor market *entry* for members of these groups; for

example, scholars have studied the impact of outreach through “diversity fairs” (Rivera 2012), joint appointments in academia (Smith and Tian 2017) and referral-based recruitment (Fernandez and Fernandez-Mateo 2006, Peterson et al 2000). However, relatively less attention has been paid to the problem of *early attrition* of first-time workers from historically underrepresented groups. This paper demonstrates that 46 percent of first-time women workers entering a garment factory in India drop out after three months of being hired and further sheds light on how organizations can retain such workers once they are hired. These findings suggest that in order to understand the labor force participation of historically underrepresented groups, the literature needs to focus as much on retention in the labor market as on entry.

Contributions to the Socialization Literature

My findings also contribute in three ways to the socialization literature. First, the existing literature has mostly studied socialization in the context of white-collar work in Western economies (Ashforth et al 2007, Fisher 1986, Bauer et al 1998, Saks and Ashforth 1997). The research is relatively silent on socialization tactics that are of particular relevance in the context of low-wage work and/or in the developing world, where socialization might be especially important. In this paper, I study first-time women workers entering and being socialized into garment manufacturing work in a developing economy. By focusing on this understudied population of workers, this paper 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 predominantly focused on informal socialization agents, such as peers and supervisors, rather than on socialization agents whose explicit formal role is to train newcomers (Saks and Gruman 2012, Morrison 1993, Ostroff and Kozlowski 1992, Louis, Posner and Powell 1983, Reichers 1987). This paper helps explicate

the important role played by these formal socialization agent roles—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 trainers are more successful than less experienced trainers at retaining first-time women workers in India. In this way, my paper takes seriously the idea that the organizational actors implementing programs and procedures within firms significantly influence the program outcomes (Castilla 2011).

Third, with respect to the content of socialization, existing scholarship has largely focused on learning the job role and on familiarization with the organization and its norms and culture more broadly (Saks and Ashforth 1997). This paper concentrates instead on a distinct kind of newcomer learning that I call *work-readiness*. I use qualitative data to delineate 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 possess a basic understanding of how to work in the formal economy; I argue that sometimes these skills need to be learned (Vallas, 2001; Willis 1997). My findings reveal that inculcating work-readiness is important, because first-time workers from underrepresented groups, in particular, lack knowledge on how to conduct themselves at work given their limited exposure to formal employment. In this way, focusing on a developing-country highlights a domain of newcomer learning that advances our understanding of newcomer socialization more generally.

Limitations and Policy Implications

While this study makes important contributions to the literatures on organizational inequality and socialization, it is not perfect and suffers from some limitations. First, this study was conducted in one organization in India with a specific sample of first-time women workers. For the purpose of

generalizability, it would be useful to replicate this study globally in many different organizations employing first-time workers from different groups historically underrepresented in formal employment. Second, the survey sample that I used to measure work-readiness quantitatively consisted of 50 first-time workers who were not part of my original sample of 510 newcomers. Though findings from the main-sample and survey-sample analyses are internally consistent, it would be useful in the future to measure the work-readiness of a larger sample of workers and to collect data on their retention so as to perform mediation analyses and to overcome any issues arising from differences between different samples.

These limitations notwithstanding, this study has implications for state and organizational policy. At the state level, governments would benefit from creating training programs to facilitate the retention of first-time workers from historically underrepresented groups. For organizations that contend with severe attrition among first-time workers, this paper has two practical implications. First, it highlights the importance of the first few months in determining whether such workers will adjust to formal employment. Second, it draws attention to the design of the training-and-orientation programs that workers experience when they first enter organizations. Specifically, the assignment of trainers and content of training has a huge impact on whether first-time workers are retained.

In sum, this study demonstrates that training programs significantly influence whether first-time workers from historically underrepresented groups are retained in organizations. First-time workers often lack work-readiness, or the basic skills needed to deal with working life; the trainers they are exposed to when they enter organizations can influence whether they become work-ready and succeed in formal employment. Approximately one billion such workers are entering formal

employment as a result of globalization and job creation; these findings have the potential to shape policies that will facilitate their retention in formal employment.

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FIGURES AND TABLES

Table 1: Descriptive Characteristics of Main Newcomer Sample (n=510)

	mean	sd
Fraction Female	1	0
Work Experience (years)	0	0
Fraction Married	0.371	0.483
Number of Children	0.392	0.697
Family Size	3.075	1.278
Age	24.18	5.311
Years of Education	7.751	3.268
Fraction from Karnataka	0.786	0.410
Fraction Hindu	0.971	0.169
Fraction with A Grade on Sewing Test	0.239	0.427
Fraction Referred to Work	0.116	0.320
Fraction Working in Jacket Lines	0.659	0.475
Fraction Working on Assembly Operations	0.625	0.484
Number of Days Spent in Training	21.51	13.72
Per Day Wages (in Rupees)	252	0
Fraction Assigned to Experienced Trainers	0.425	0.495
Fraction Still Working after 3 Months	0.637	0.481
Fraction Still Working after 1 Month	0.888	0.315

Table 2: Pre-Hire Characteristics of Newcomers Assigned to Less-Experienced versus Experienced Trainers

<i>Newcomers by Assignment to</i>	Less-Experienced Trainers	Experienced Trainers	Difference
Fraction Married	0.341 (0.475)	0.410 (0.493)	-0.069
Number of Children	0.352 (0.632)	0.447 (0.775)	-0.095
Family Size	2.997 (1.223)	3.180 (1.344)	-0.183
Age	23.77 (4.980)	24.74 (5.691)	-0.970**
Years of Education	7.863 (3.275)	7.599 (3.259)	0.264
Fraction from Karnataka	0.775 (0.418)	0.802 (0.400)	-0.027
Fraction Hindu	0.973 (0.163)	0.968 (0.177)	0.005
Fraction with A Grade	0.256 (0.437)	0.217 (0.413)	0.039
Fraction Referred to Work	0.116 (0.321)	0.115 (0.320)	0.001
Observations	293	217	

mean coefficients; sd in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: Experienced trainers have over 9 years of work experience (above the median)

Figure 1: Effect of Trainer Assignment on First-Time Female Workers' Likelihood of Retention after Three Months of Entering the Workforce



Figure 2: Effect of Trainer Assignment on First-Time Female Workers' Likelihood of Retention after One Month of Entering the Workforce



Figure 3: Effect of Trainer Assignment on First-Time Female Workers' Long-Term Survival in Formal Employment (Kaplan-Meier)

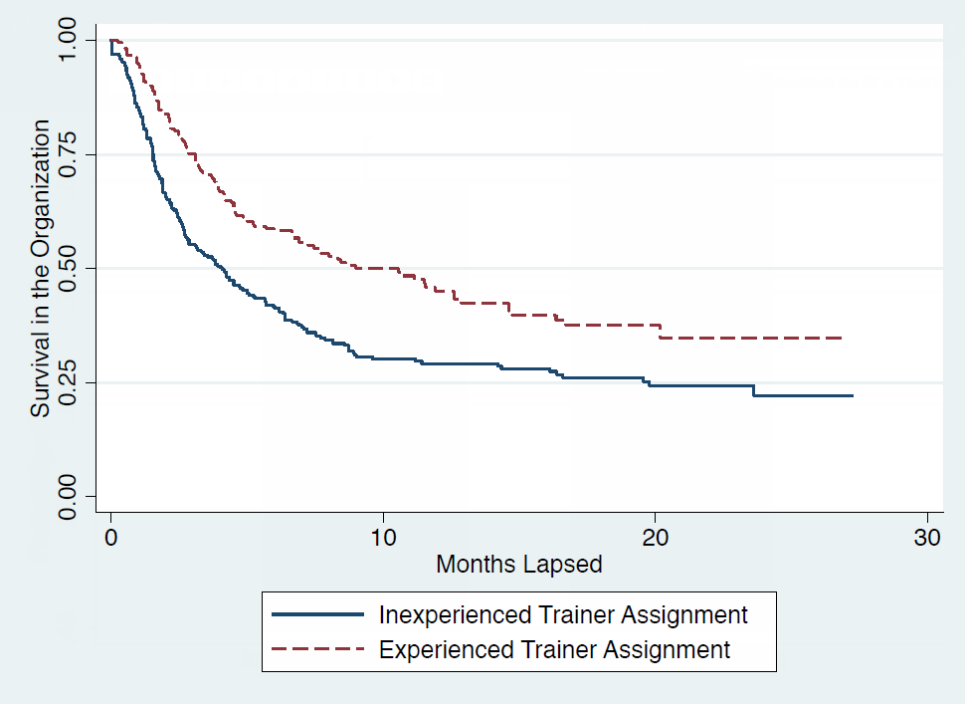


Table 3: OLS Regression of the Effect of Trainer Assignment on Three Month Retention for First-Time Female Workers

	(1)	(2)	(3)	(4)
Family Size	0.013 (0.017)	0.008 (0.019)	0.012 (0.021)	0.008 (0.020)
Number of Children	0.031 (0.022)	0.015 (0.030)	0.013 (0.029)	0.010 (0.026)
Married	0.174*** (0.029)	0.219*** (0.028)	0.218*** (0.028)	0.218*** (0.032)
Age	-0.012** (0.005)	-0.013** (0.006)	-0.019 (0.015)	-0.015 (0.010)
From Karnataka	-0.079 (0.066)	-0.035 (0.054)	-0.019 (0.084)	0.074 (0.075)
Years of Education	-0.012* (0.006)	-0.009 (0.006)	-0.019 (0.069)	-0.009 (0.032)
Hindu	0.056 (0.124)	0.008 (0.117)	0.016 (0.127)	0.005 (0.132)
A Grade on Sewing Test	-0.004 (0.040)	-0.002 (0.031)	-0.004 (0.033)	0.003 (0.035)
Working in Jacket Lines		0.119 (0.082)	0.159* (0.080)	0.011 (0.050)
Working on Assembly Operations		0.008 (0.033)	0.016 (0.036)	0.007 (0.039)
Number of Days Spent in Training		0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Trainer-Trainee Both from Karnataka			-0.009 (0.072)	-0.146 (0.090)
Trainer-Trainee Age Gap			-0.005 (0.012)	-0.002 (0.005)
Trainer-Trainee Education Gap			-0.011 (0.069)	-0.001 (0.033)
Experienced Trainer Assignment				0.244*** (0.051)
Constant	0.922*** (0.208)	0.802*** (0.219)	1.044*** (0.307)	0.910** (0.377)
Month/Year FE	No	Yes	Yes	Yes
Observations	510	510	510	510
R Squared	0.050	0.126	0.131	0.169

Standard errors clustered by trainer are in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: 185 workers quit the firm within three months of joining.

Table 4: OLS Regression of Effect of Trainer Assignment on Work-Readiness of First-Time Female Workers

	(1)	(2)
Family Size	0.005 (0.044)	-0.004 (0.045)
Number of Children	0.070 (0.068)	0.066 (0.069)
Married	-0.013 (0.174)	-0.051 (0.195)
Age	-0.001 (0.007)	0.004 (0.007)
From Karnataka	-0.005 (0.092)	-0.012 (0.108)
Years of Education	0.006 (0.009)	0.002 (0.010)
Hindu	0.172 (0.139)	0.202 (0.130)
A Grade on Sewing Test	0.030 (0.145)	0.063 (0.143)
Experienced Trainer Assignment		0.154*** (0.035)
Constant	3.030*** (0.230)	2.923*** (0.189)
Observations	50	50
R Squared	0.127	0.226

Standard errors clustered by trainer are in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Data come from a survey of 50 newcomers;

Work-readiness is measured on a 5-point ascending Likert scale;

Mean of work-readiness is 3.28 and standard deviation is 0.23;

See Appendix A for a detailed description of the scale.

Table 5: OLS Regression of Effect of Trainer Assignment on Three Month Retention for Referred and Older Workers

	(1)	(2)	(3)	(4)
Family Size	0.012 (0.016)	0.008 (0.018)	0.009 (0.019)	0.010 (0.018)
Number of Children	0.031 (0.022)	0.033 (0.021)	0.031 (0.020)	0.025 (0.022)
Married	0.175*** (0.029)	0.163*** (0.023)	0.158*** (0.024)	0.173*** (0.021)
Age	-0.012** (0.005)	-0.013** (0.005)	-0.013** (0.005)	-0.017*** (0.004)
From Karnataka	-0.083 (0.064)	-0.088 (0.070)	-0.086 (0.071)	-0.086 (0.070)
Years of Education	-0.012* (0.006)	-0.012* (0.006)	-0.014** (0.005)	-0.012* (0.006)
Hindu	0.059 (0.124)	0.071 (0.144)	0.079 (0.149)	0.074 (0.142)
A Grade on Sewing Test	-0.001 (0.040)	0.009 (0.035)	0.006 (0.037)	0.007 (0.037)
Referred to Work	0.046 (0.060)	0.048 (0.064)	0.150** (0.064)	0.050 (0.062)
Experienced Trainer Assignment		0.195*** (0.033)	0.223*** (0.032)	0.172*** (0.037)
Experienced Trainer * Referred			-0.246** (0.083)	
Experienced Trainer * Older				0.136*** (0.040)
Constant	0.911*** (0.210)	0.856*** (0.240)	0.848*** (0.245)	0.937*** (0.227)
Observations	510	510	510	510
R Squared	0.051	0.091	0.097	0.095

Standard errors clustered by trainer are in parentheses

* p<0.1, ** p<0.05, *** p<0.01

59 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.

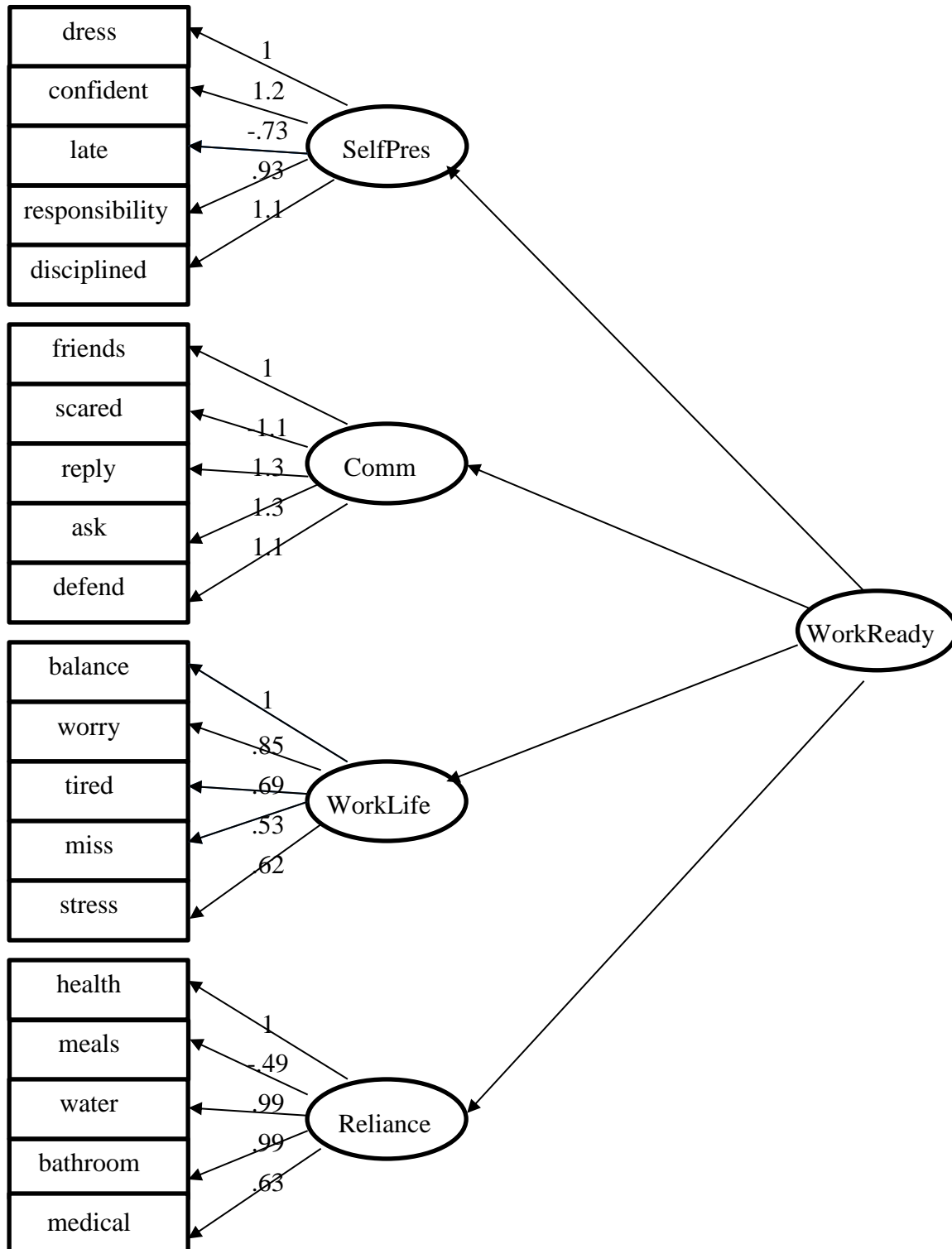
Appendix A: Work-readiness Scale

Scale	Variable Description	Values	Statistics	
Work-readiness	<i>Self-Presentation at Work</i>			
	I know how to dress for work.	1=Strongly Disagree	Mean=3.28 SD=0.23 Alpha=0.73	
	I present myself confidently at work.	2=Disagree		
	I am often late to work. (<i>reverse</i>)	3=Neither Agree nor Disagree		
	I take responsibility for my tasks at work.	4=Agree		
	I am disciplined in meeting my targets each day at work.	5=Strongly Agree		
	<i>Interpersonal Communication</i>			
	I have made friends at work.			
	I am scared of my supervisor at work. (<i>reverse</i>)			
	I reply back when I'm spoken to at work.			
	I ask questions when in doubt at work.			
	I defend myself when I'm criticized without reason at work.			
	<i>Work-Life Separation</i>			
	I struggle to balance work and home life. (<i>reverse</i>)			
	I worry about my children and family while at work. (<i>reverse</i>)			
	I am constantly tired at work. (<i>reverse</i>)			
	My work routine is stressful. (<i>reverse</i>)			
	I miss my family at work. (<i>reverse</i>)			
	<i>Self-Reliance</i>			
	I take care of my health at work.			
	I skip meals at work. (<i>reverse</i>)			
	I drink plenty of water at work.			
	I go to the bathroom when I need to at work.			
I seek medical help when I am not feeling well at work.				

Note: Reverse refers to items on the scale that were reverse-coded.

Confirmatory Factor Analysis of Work Readiness Scale

In order to test the properties of the work readiness scale, I performed confirmatory factor analysis. To perform this analysis, I recruited 200 participants on Amazon’s Mechanical Turk, who filled out the Work Readiness scale. Survey participation was open only to women from India, given the focus of this study. The survey took approximately 5 minutes to fill and participants were paid \$0.50 for their time. Results from the analysis, presented below, confirm the scale composition. All coefficients had $p < 0.01$ and the fit of the model was good ($\chi^2(169) = 464.91, p < 0.01$).



Appendix B: Additional Tables

Table B1: OLS Regression of the Effect of Trainer Assignment on One Month Retention for First-Time Female Workers

	(1)	(2)	(3)	(4)
Family Size	0.007 (0.006)	0.003 (0.013)	0.005 (0.013)	0.003 (0.012)
Number of Children	0.009 (0.018)	0.002 (0.025)	-0.001 (0.024)	-0.003 (0.023)
Married	0.026 (0.031)	0.037 (0.030)	0.040 (0.028)	0.040 (0.027)
Age	-0.001 (0.002)	-0.001 (0.002)	-0.008 (0.008)	-0.006 (0.005)
From Karnataka	-0.057** (0.026)	-0.006 (0.021)	-0.004 (0.028)	0.037 (0.033)
Years of Education	0.005 (0.006)	0.005 (0.005)	0.029 (0.035)	0.033 (0.025)
Hindu	0.014 (0.099)	-0.021 (0.101)	-0.016 (0.103)	-0.020 (0.103)
A Grade on Sewing Test	-0.014 (0.026)	-0.028 (0.031)	-0.028 (0.031)	-0.025 (0.031)
Working in Jacket Lines		0.104** (0.046)	0.128** (0.045)	0.064* (0.032)
Working on Assembly Operations		0.042 (0.026)	0.047 (0.027)	0.043 (0.027)
Number of Days Spent in Training		0.004** (0.001)	0.004** (0.001)	0.004*** (0.001)
Trainer-Trainee Both from Karnataka			0.007 (0.027)	-0.053 (0.033)
Trainer-Trainee Age Gap			-0.007 (0.007)	-0.006 (0.003)
Trainer-Trainee Education Gap			0.023 (0.033)	0.028 (0.022)
Experienced Trainer Assignment				0.107*** (0.023)
Constant	0.887*** (0.084)	0.621*** (0.137)	0.587** (0.033)	0.528* (0.022)
Month/Year FE	No	Yes	Yes	Yes
Observations	510	510	510	510
R Squared	0.010	0.112	0.116	0.133

Standard errors clustered by trainer are in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: 57 workers quit the firm within one month of joining.

Table B2: Cox Hazard Rate Model of the Effect of Trainer Assignment on the Hazard of Leaving Formal Employment for First-Time Women Workers

	(1) Hazard Ratio	(2) Hazard Ratio
Family Size	0.840*** (0.049)	0.849*** (0.051)
Number of Children	0.943 (0.108)	0.925 (0.107)
Married	0.420*** (0.067)	0.431*** (0.069)
Age	1.031** (0.016)	1.037** (0.016)
From Karnataka	1.269** (0.144)	1.250 (0.172)
Years of Education	1.025 (0.019)	1.027 (0.020)
Hindu	0.806 (0.176)	0.772 (0.183)
A Grade on Sewing Test	0.912 (0.115)	0.892 (0.106)
Experienced Trainer Assignment		0.637*** (0.081)
Observations	510	510
Pseudo R ²	0.019	0.023

Exponentiated coefficients

Standard errors clustered by trainer are in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Table B3: OLS Regression of the Effect of Trainer Assignment on Daily Output and Organizational Identification for First-Time Female Workers

	(1) Output	(2) Output	(3) Identification	(4) Identification
Family Size	0.283 (1.396)	0.364 (1.375)	-0.022 (0.034)	-0.018 (0.037)
Number of Children	0.783 (3.918)	0.893 (4.038)	0.091 (0.076)	0.093 (0.080)
Married	-1.455 (6.632)	-1.782 (6.813)	-0.169 (0.103)	-0.150 (0.104)
Age	-0.026 (0.328)	-0.076 (0.314)	0.005 (0.013)	0.003 (0.013)
From Karnataka	0.397 (4.436)	0.494 (4.526)	-0.237* (0.103)	-0.233* (0.094)
Years of Education	-0.313 (0.650)	-0.339 (0.649)	0.042* (0.016)	0.044* (0.018)
Hindu	-3.435 (5.323)	-3.115 (4.878)	-0.281** (0.099)	-0.296** (0.103)
A Grade on Sewing Test	-5.215 (5.651)	-5.415 (5.598)	0.085 (0.095)	0.069 (0.112)
Experienced Trainer Assignment		2.065 (4.315)		-0.076 (0.081)
Constant	53.898*** (8.902)	53.936*** (8.971)	3.802*** (0.115)	3.855*** (0.113)
Observations	90	90	50	50
Mean of DV	46.920	46.920	3.783	3.783
Std. Dev. of DV	16.736	16.736	0.330	0.330
R Squared	0.028	0.032	0.189	0.201

Standard errors clustered by trainer are in parentheses

* p<0.1, ** p<0.05, *** p<0.01

Note: Data for Models 1 and 2 comes from RFID output data on a subsample of newcomers;

Data for Models 3 and 4 come a survey of 50 newcomers;

Daily output is measured as number of pieces produced adjusted for the standard time to produce that piece, such that the measure is comparable across workers producing different kinds of pieces; this data is available for only 90 out of the 510 new joiners since the factory started collecting this data in January 2013 for three out of eleven lines; Organizational Identification is measured on a 5-point ascending Likert scale from Ashforth and Mael (1992) administered to the survey sample.