

Facilitating Worker Mobility: A Randomized Information Intervention among Migrant Workers in Singapore

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Worker mobility is an important determinant of employment terms and conditions in the labor market (Scully 1973; Raimondo 1983; Naidu 2010; Naidu and Yuchtman 2013). Foreign migrant workers, in particular, often have limited job-to-job mobility in their countries of employment due to imperfect information (Huang and Yeoh 1996; Kossoudiji and Cobb-Clark 2002; Munshi 2003; Beaman 2012). Incomplete information can tie migrant workers to their current employers and lead them to accept less favorable terms of employment. In this paper, we examine whether relaxing information constraints related to job-to-job transitions can improve employment outcomes of foreign workers.

In 2013, 82 million individuals from developing countries resided in developed countries, mostly for the purpose of employment.¹ Labor migration leads to large income gains (Clemens, Montenegro, and Pritchett 2009; Clemens 2013), some of which are shared with their family members through remittances (Yang 2008; McKenzie, Gibson, and Stillman 2010). Remittances sent to developing countries reached \$551 billion in 2013 and have a range of positive impacts on recipient households (Yang 2011; Gibson and McKenzie 2014).

At the same time, there is a growing sense among policy makers and non-governmental organizations (in both sending and receiving countries) that migrant workers face potentially important barriers to improving their conditions

This project is conducted with approval from the National University of Singapore institutional review board (approval no. NUS-1879). This article benefited greatly from the comments of the editors and anonymous referees. We are also grateful to seminar participants at the National University of Singapore, the Institute of Labor Economics (IZA), and Jinan University for their helpful comments and suggestions and to Medha Basu, Anna Weiling How, and Stephanie Foo, who provided outstanding research assistance. Contact the corresponding author, Slesh A. Shrestha, at slesh@nus.edu.sg.
¹ South-north migration accounted for 35% of total international migrants in 2013 (United Nations 2013). In the past 2 decades, south-north migration has been the main driver of global migration, growing more than twice as fast as the global total.

Electronically published September 13, 2019
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of work overseas. In particular, information constraints could undermine the economic benefits from international migration by decreasing migrants' incomes or their ability to obtain better work conditions.² In a standard job search model, workers use information about market conditions to determine their outside options (Burdett and Vishwanath 1988; Gonzalez and Shi 2010). Migrant workers, however, face multiple information constraints in their foreign country of employment. Restricted information on job vacancies, partly because of limited local social networks, increases costs of searching for new employment. In addition, lack of knowledge about legal rights and regulations regarding changing employers can further restrict labor mobility and create monopsony power for employers (Ashenfelter, Farber, and Ransom 2010; Staiger, Spetz, and Phibbs 2010; Manning 2011; Matsudaira 2014).³ Both factors could reduce migrant reservation wages, restrict their choice of employment, reduce workers' bargaining power relative to current employers, and make it difficult to leave jobs with poor employment conditions.

We implemented a randomized controlled trial examining the impact of providing information aimed at facilitating worker mobility. Our study population was composed of Filipino maids in Singapore. Filipinos make up the largest share of foreign domestic workers (FDWs) in Singapore. FDWs are mostly female and work in private homes performing household chores. The informal nature of the job imposes constraints on effective monitoring of FDWs' working conditions, and surveys of FDWs indicate poor knowledge of their legal rights to change employers. This provides an ideal setting to test the role of incomplete information in influencing work conditions and worker mobility.

FDWs assigned to the treatment group received verbal and written information on Singaporean labor laws about changing employers. Treated FDWs were also handed a list of current job vacancies for domestic work in Singapore and were informed of a free online job portal where they could get more up-to-date information on FDW job openings. Several months later, we reinterviewed study participants to determine the impacts of the treatment.

The treatment led, first of all, to substantial improvements in workers' knowledge about their legal rights, in particular that they could find and change

² Poor working conditions for migrants are a frequent international news item, such as reports of high death rates among migrants in dangerous jobs. For example, in Qatar, a major Middle Eastern destination for migrants from South Asia, 241 Indian and 185 Nepali construction workers died in 2013 (Booth, Gibson, and Partison 2013). For a detailed summary of research on the effectiveness of policies that enhance benefits and reduce risks from migration at all three stages of the migration process (predeparture, during migration, and return migration), see McKenzie and Yang (2015).

³ Legal restrictions that tie migrants to their employers or make it difficult to change employers are commonplace, particularly in countries with large migrant workforces (Ruhs 2013). This is clearly a separate issue from imperfect information about migrant workers' legal rights to change jobs.

employers without the use of an agent or middleman. In addition, the treatment led to improvement in an index of self-reported employment conditions. Among the components of the index, the treatment had positive impacts on daily work hours as well as “other conditions” but not on monthly salaries. These overall impacts are statistically significant at conventional levels.

Subsample analyses help shed light on the distributional impacts of the information intervention. The treatment effects on work conditions are concentrated among workers who at baseline (i.e., prior to treatment) had poor knowledge about their legal rights related to job mobility. Positive impacts on employment conditions were also larger in magnitude among “vulnerable” FDWs (i.e., those who reported at baseline to have poor work conditions on specific work dimensions protected by the law in Singapore). This vulnerable subpopulation also became more likely to find a new employer as a result of treatment.⁴

To our knowledge, this paper is the first empirical study of the impact of improving information related to migrant worker job mobility. This paper contributes to a growing literature on the effects of information imperfections in markets for migrant work and in labor markets more generally. Information imperfections have been shown in some cases (but not others) to affect the migration decision itself (McKenzie, Gibson, and Stillman 2013; Bryan, Chodhury, and Mobarak 2014; Beam 2016; Beam, McKenzie, and Yang 2016). Asymmetric information within transnational households (i.e., between migrants and their family members back home) has been shown to influence remittances and savings rates (Ambler 2015; Ashraf et al. 2015). In addition, many public policies aimed at promoting employment among native workers focus on improving access to information (Heckman, Lalonde, and Smith 1999).

Our paper is also connected to a smaller body of work on the impact of labor market restrictions or distortions on migrant work. Naidu, Nyarko, and Wang (2016) show that legal reform in the United Arab Emirates that loosened restrictions on migrant workers’ ability to renew their employment contracts led to higher migrant earnings. McKenzie, Theoharides, and Yang (2014) show patterns in Filipino migration responses to overseas economic shocks that are consistent with binding minimum wages for migrant work. We contribute to this emerging literature by examining impacts of improving information on migrant legal rights to change jobs.

⁴ The nonvulnerable subgroup, in contrast, did not become more likely to change employers as a result of treatment, but in this group we did find a positive treatment effect on stated intentions to seek to improve work conditions in the future.

This paper also considers the role of labor mobility and easier online search options in determining labor market outcomes (Kuhn and Skuterund 2004; Stevenson 2009; Kroft and Pope 2014). Mobility restrictions have been shown to affect wages and welfare among native workers in developed (Naidu 2010) and developing (von Lilienfeld-Toal and Mookherjee 2010) countries.

The rest of the paper proceeds as follows: Section I describes the FDW labor market in Singapore, Section II outlines the research design and the empirical strategy, Section III presents estimates of the causal impact of information intervention on labor market outcomes, and Section IV presents concluding comments.

I. Background

FDWs are common in Asian economies like Singapore, Hong Kong, and South Korea; Middle Eastern countries like Bahrain, Kuwait, Saudi Arabia, and Israel; and in Western countries such as the United States, the United Kingdom, and Canada (albeit at a much smaller scale).⁵ Domestic work is also the most important sector of employment among female migrants from several developing countries. More than 85% of all female migration from Sri Lanka and 40% from the Philippines consist of domestic workers. In some countries, FDWs even outnumber male migrants.⁶ This demand for FDWs is fueled by the growing participation of women in industrialized nations in formal labor markets and their consequent reliance on migrant labor for their household production needs. An aging population in developed countries further adds to this demand (Yeoh and Huang 2010; M. Kremer and S. Watt, unpublished manuscript).

Since 1978, when Singapore first granted work permits to FDWs, the number of FDWs working in Singapore increased from 40,000 in 1988 to 200,000 in 2009 (Yeoh, Huang, and Gonzalez 1999). Currently, one in five Singaporean households employs a foreign maid. Approximately, three-quarters of FDWs come from the Philippines, one-fifth come from Indonesia, and the rest come from other government-approved countries.⁷ They make up close to 20% of Singapore's foreign workforce (Government of Singapore 2014b).

The recruitment and employment of FDWs in Singapore are governed by the Employment of Foreign Manpower Act. Under this act, households with

⁵ In Hong Kong, close to 60% of educated women with young children employ FDWs (Cortes and Pan 2013); in the United States, immigrants represent 25% of the workers employed in private household consumption (Cortes and Tessada 2011).

⁶ Domestic workers account for 66% of those departing for foreign employment in Indonesia and 42% in Sri Lanka.

⁷ This list includes Thailand, Sri Lanka, the Philippines, Bangladesh, Hong Kong, India, Indonesia, Macau, Malaysia, Myanmar, South Korea, and Taiwan. The first three countries were approved for recruitment at the outset in 1978, whereas the others were added later over time.

sufficient income and domestic needs are allowed to hire a female FDW. She must be between the ages of 23 and 50 and have completed a minimum of 8 years of education. In turn, employers are required to pay a one-time security bond of S\$5,000.⁸ The deposit is refunded when the worker returns safely to her home country after the contract expires. In addition, employers also have to pay a monthly levy of S\$265 to the government and purchase personal accident and medical insurance policies for each FDW they hire. They are required to pay FDWs a prenegotiated fixed salary every month, no later than 7 days after the last day of the salary period; to allow for weekly rest days; and to provide a safe work environment.⁹

Employers can hire FDWs directly or through an employment agency, of which there are more than 1,000 operating in Singapore. These agencies recruit potential workers through brokers in their home country and match them with employers in Singapore. In addition, they provide other services like FDW training and assist employers in drawing up employment contracts with their FDWs that specify the terms and conditions of employment, such as monthly salary. According to the Government of Singapore (2010), 90% of households in Singapore hire FDWs through an employment agency, and a majority of these employers also receive free replacements of FDWs from the agency for a stated period of time if they are not satisfied with their current worker. In contrast, FDWs' work visa is tied to their employer and only allows them to work on household chores at the location stated in their contract. It also requires them to reside (or "live in") with their employer. The length of the contract is 2 years but can be renewed for 6 more years. Renewals after 8 years of employment are considered on a case-by-case basis.

The Employment of Foreign Manpower Act allows FDWs to change employers at any time as long as they continue to work as domestic workers. This law guarantees FDWs the right to transfer jobs without having to leave Singapore, use an employment agent, or pay any fines. Workers do require approval, however, from their current employer to transfer. To initiate a transfer, their

⁸ The average exchange rate from June to October 2013 was US\$1 = S\$1.24.

⁹ Safe work environments are defined as having "sufficient ventilation, safety, privacy, space, and protection from the elements like rain and sun." In addition, FDWs must undergo a medical checkup every 6 months and attend the Settling-in Program within 3 working days of arriving in Singapore. They are not allowed to bring with them any family members to Singapore, marry Singaporeans, or become pregnant during their stay in the country. Employers must complete the Employer's Orientation Program. More detailed information on regulations and requirements can be found in Chap. 91A, Schedules 1 and 4, of the Employment of Foreign Manpower Act (available at <http://www.mom.gov.sg/legislation>).

new employer must file an application for a new work permit on their behalf at the Ministry of Manpower.¹⁰ Almost half of FDWs remain employed with the same employer for more than a year; fewer than 3% of FDWs have changed more than two employers (Government of Singapore 2014a).¹¹

FDWs are not protected by the Employment Act, which regulates work hours, wages, and other benefits of workers in Singapore. The Singapore government maintains that such controls are impractical due to the unstructured nature of household chores and, therefore, leaves employment conditions to the discretion of the employer and the employee. Instead each employer is required to write a contract with the FDW that states the terms of the employment, which is usually limited to the monthly salary that the employer will pay, and to file this document with the Ministry of Manpower. Not surprisingly, the majority of FDW complaints relate to aspects of their work that are not covered by the employment contract such as work hours and freedom of movement. Human Rights Watch (2005) found that more than 80% of domestic workers in Singapore complained of having a heavy workload without enough time to rest.¹² More than two-thirds of FDWs complained about limited access to information and external communication.

II. Experimental Design

Our sample consists of Filipino migrants working in Singapore as domestic workers. The research team visited Lucky Plaza Mall, a centrally located shopping mall popular with Filipino workers, every Sunday from June 2013 to October 2013. Filipino FDWs commonly visit the mall on their rest day (typically Sunday) to meet other FDWs and send money home via the many remittance companies located there. Of the FDWs we approached for an interview, 33.4% agreed to participate in the study. Those who agreed to participate were administered a baseline survey on the spot. Half of respondents were assigned to the treatment group based on a randomly selected sealed envelope that was opened by the surveyor immediately after completing the survey and revealed the treatment status. Participants selected into the treatment group received the treatment

¹⁰ The transfer approval form signed by the current employer must be submitted along with this application.

¹¹ The transfer rates across employment agencies vary from 0% to 20%, whereas the retention rates vary from 0% to 100%. Both measures are used as indicators of the employment agency's quality and performance (Government of Singapore 2014a).

¹² Human Rights Watch (2005) estimates that the Indonesian Embassy in Singapore receives 50 complaints per day, mostly from domestic workers. The Philippine Embassy and the Sri Lankan High Commission each receive 40–80 complaints from FDWs per month.

soon thereafter. All participants were then contacted via phone 7–8 months after the initial visit for a follow-up survey.¹³

The baseline sample consisted of 303 FDWs, of which 153 FDWs were randomly assigned to the treatment group. Columns 1 and 2 of table 1 report means of baseline variables in the control and treatment groups, respectively, whereas column 3 reports the difference in means. Across all the reported demographic, employment, and knowledge variables, we cannot reject that means are equal across treatment and control groups at conventional levels of statistical significance. As indicated by the *F*-test statistic at the bottom of column 3, we also cannot reject the joint equality of means between the two groups across the full set of variables shown.

Participants in our study are, on average, 37 years old, slightly more than two-fifths are married, and roughly three-fifths have completed college. The average duration of employment in Singapore is 8 years, and they have been employed with the same employer for slightly more than 4 years. Across the sample, we find that employers do not always adhere to labor laws that are designed to protect FDWs. In fact, 30% of FDWs report earning less than the minimum wage of US\$400 set by the Philippine government for its overseas domestic workers.¹⁴ This is perhaps not surprising. Philippine law does not apply in Singapore, and the government of Singapore does not mandate a minimum wage for FDWs, including Filipino FDWs, who are working in Singapore.

Although Singaporean law leaves many aspects of domestic work unregulated, it mandates that FDWs be paid within a week of the last day of their salary period, guarantees one rest day per week, and requires provision of a safe workspace. More than 20% of FDWs report not having at least one of these conditions fulfilled by their current employer. We categorize them as “vulnerable” FDWs for later analysis.

FDWs were also tested on Singaporean labor laws related to FDW transfer. They were asked to provide true-or-false answers to the following four statement questions: According to Singaporean law, FDWs are allowed (*a*) to work

¹³ In the baseline survey, study participants were asked to provide a personal cell phone number so we could reach them for the follow-up survey. They also indicated their preferred day/time of the week to receive our call. A majority of participants chose Sunday (their weekly rest day) as their preferred day, whereas many others chose early afternoon on a weekday. For the first try, we called on the preferred day/time as stated in the baseline survey. If we were unsuccessful on the first try, we called at least 20 times at different times on both weekdays and weekends (including Sundays). After the tenth unsuccessful call, we sent a short text message.

¹⁴ The Philippines Overseas Employment Administration regulates the recruitment and employment of Filipinos for work abroad, including setting their minimum wage standards. For detailed discussion on the minimum wage standards for Filipino FDWs, see McKenzie, Theoharides, and Yang (2014).

TABLE 1
SUMMARY STATISTICS AND BALANCE TESTS

	Baseline Sample			Follow-Up Sample		
	Control (1)	Treatment (2)	Difference (3)	Control (4)	Treatment (5)	Difference (6)
Demographic characteristics:						
Age (years)	36.60	37.37	.772	36.88	38.65	1.775*
Married	.418	.427	.008	.438	.449	.011
Number of children	1.373	1.275	.099	1.360	1.449	-.090
College graduate	.562	.607	.045	.607	.618	.011
Employment characteristics:						
Duration in Singapore (years)	8.059	8.200	.141	8.404	9.404	1.000
Duration of current employment (years)	4.185	4.154	-.031	4.235	4.673	.438
Work more than 8 hours/day ^a	.954	.973	.019	.944	.989	.045*
Monthly salary (S\$)	526.93	523.81	-3.121	532.92	537.28	4.360
Paid less than S\$500 ^b	.366	.300	-.066	.326	.236	-.090
Vulnerable FDW	.209	.247	.038	.202	.236	.034
Ever paid late	.046	.047	.001	.056	.045	-.011
Ever worked on rest days	.137	.167	.029	.135	.169	.034
Ever injured at work	.039	.080	.041	.023	.079	.056*
Sends remittances	.954	.927	-.028	.955	.899	-.056
Communicates with other FDWs	.778	.773	-.004	.843	.764	-.079
Knowledge about labor laws:						
Need approval	.935	.967	.032	.955	.966	.011
Work without agent	.255	.287	.032	.225	.270	.045
Change without agent	.261	.300	.039	.303	.337	.034
Change without leaving	.739	.780	.041	.719	.809	.090
High knowledge	.340	.380	.040	.315	.393	.079
Observations	153	150		89	89	
Months between baseline and follow-up				7.556	7.927	.371
Attrition between baseline and follow-up	.418	.407	-.01			
F-test statistics			.716			1.037
p-value			.794			.422

Note. "Vulnerable FDW" is a dummy variable that equals 1 if a foreign domestic worker (FDW) reports being paid late, working on rest days, or getting injured at work. "High knowledge" is a dummy variable that equals 1 if an FDW correctly answers at least two of three questions regarding the following: obtaining work without an agent, changing jobs without an agent, and changing jobs without leaving the country. Reported *p*-values are based on robust standard errors.

^a The Employment Act requires that native workers in Singapore not work more than 8 hours per day. However, FDWs are not protected by the act.

^b The Philippines Overseas Employment Administration sets a minimum wage for Filipino FDWs. The minimum wage is US\$400 (or S\$500, based on the average exchange rate from June to October 2013). This minimum wage law, however, does not apply in Singapore and is not enforced by the Singaporean government.

* $p < .1$.

in Singapore only via an agent, (b) to change employers without using an agent, (c) to change employers but have to leave Singapore first, and (d) to change employers but need an approval from the current employer. The correct answers are "false" for the first and third questions and "true" for the second and fourth questions. More than 95% of FDWs answered the fourth question

correctly. Of the remaining questions, however, only 10% of FDWs could answer all three correctly, and 35% answered at least two of the three correctly.¹⁵

The Singaporean government does not disclose census data on FDWs, which makes it difficult to compare the characteristics of our study sample with that of the FDW population working in Singapore. The only other data on FDW characteristics that we are aware of come from an independent survey conducted by the Humanitarian Organization for Migration Economics (HOME).¹⁶ Although this survey might not constitute a representative sample, the data were collected by visiting at least four sites around Singapore that are frequented by FDWs, and FDWs from four different countries including the Philippines were represented. This sample allows us to compare how Filipino FDWs (the focus of our study) might be different from the rest of the FDWs in Singapore and to compare the characteristics of Filipino maids across the two data sets.

Table 2 presents means of variables that are common across the two data sets and additional variables from the HOME data that are related to job mobility and employment outcomes of FDWs in Singapore. Column 1 reports means for all FDWs included in the HOME sample, and column 2 restricts this sample to include only Filipino maids.

Filipinos are, on average, older and are more likely to have completed college than FDWs of other nationalities. They also have more years of experience working in Singapore (7.5 vs. 6.1 years for the overall sample). Despite these differences, however, job mobility among Filipino FDWs is as limited as that of FDWs from other countries. More than 30% of FDWs (32% for Filipinos and 34.7% for the entire sample) have had only one employer during their entire time in Singapore. In addition, only about one-fourth of FDWs are allowed to leave their employer's house at will, and one-fifth of them report that their employers regularly search their personal belongings. Both Filipino and non-Filipino FDWs report a similar workload and monthly salary.¹⁷

Column 3 of table 2 reports the means for FDWs from our study sample. Across all the common variables (except one), FDWs in our study sample do not look very different from Filipino FDWs in the HOME sample (*p*-values

¹⁵ We use knowledge of these three labor laws in the follow-up survey to measure the impact of the treatment on FDW knowledge.

¹⁶ The survey was conducted between November 2013 and May 2014. HOME is a nongovernmental organization founded in 2004 with the goal of serving the needs of the migrant worker community in Singapore. For more information about the survey and to download the report, see HOME (2015).

¹⁷ Filipino FDWs are less likely to be earning below the minimum wage set by the Philippine government. This is expected given that other governments do not impose minimum wage requirements for their overseas workers.

TABLE 2
COMPARISON ACROSS DIFFERENT SAMPLES

	HOME Sample		Study Sample (3)	<i>p</i> -Value (4)
	All (1)	Filipinos Only (2)		
Demographic characteristics:				
Age (years)	33.39	36.38	36.98	.400
Married	.299	.351	.422	.135
College graduate	.545	.656	.584	.134
Employment characteristics:				
Duration in Singapore (years)	6.135	7.469	8.129	.293
Worked with only one employer	.347	.320		
Duration of current employment (years)	3.510	3.758	4.170	.384
Works more than 8 hours/day	.967	.981	.964	.279
Monthly salary (S\$)	520.39	548.66	525.38	.480
Paid less than S\$500 ^a	.336	.240	.333	.035
Employer lets FDW leave house at will	.253	.454		
Employer searches FDW's belongings	.202	.223		
Observations	455	154	303	
<i>F</i> -test statistics				1.525
<i>p</i> -value				.157

Note. "HOME Sample" includes foreign domestic workers (FDWs) of four nationalities working in Singapore surveyed by the Humanitarian Organization for Migration Economics between November 2013 and May 2014. "Study Sample" includes control and treatment FDWs who were interviewed in the baseline between June 2013 and October 2013. Column 4 reports *p*-values of the differences between FDWs in our study sample vs. Filipino FDWs in the HOME sample.

^a The Philippines Overseas Employment Administration sets a minimum wage for Filipino FDWs. The minimum wage is US\$400 (or S\$500, based on the average exchange rate from June to October 2013). This minimum wage law, however, does not apply in Singapore and is not enforced by the Singaporean government.

of these differences are reported in col. 4). The share of FDWs who report earning less than the minimum wage set by the Philippine government is statistically significantly different across the two samples ($p = .035$). But we cannot reject the joint equality of means between the two samples as indicated by the *F*-test statistics at the bottom of column 4.

A. Information Intervention

The treatment consisted of verbal and written information about the labor market for domestic help in Singapore. We provided two types of information. FDWs who received treatment were first handed a flyer on Singaporean labor laws about changing employers. It included information about their legal rights guaranteed in Singapore and provided detailed instructions on how to request transfers, including where to obtain application forms.

The second set of information focused on employment opportunities currently available to them in Singapore. They were informed about a new, free online job portal with job postings from employers seeking to hire FDWs. The

portal, DWjobs.org, was set up in 2012 as a nonprofit enterprise; the website and its mobile application serve as a job-matching platform for FDWs seeking to transfer by allowing prospective employers to post advertisements and FDWs to download them for free.¹⁸ In addition to this information, treated FDWs were also given a printout of the 10 most recent job postings on the portal. Each job posting came with a brief job description and the employer's contact information. We updated this printout weekly.

Our survey staff provided a verbal summary of the key information from the written material before handing it over to respondents in the treatment group. Figure A1 reproduces the FDW legal rights flyer, and figure A2 shows an example of a job postings printout used in the intervention.

We would expect that this information could increase job mobility as well as increase employees' bargaining power by improving their outside options. If FDWs were information constrained, this information intervention should decrease their job search costs.

B. Sample Attrition

Of 303 FDWs interviewed in the baseline, we successfully followed up with 178 FDWs via phone.¹⁹ The attrition rate is almost identical and not statistically different between treatment and control groups (see table 1, bottom of col. 3), suggesting that attrition bias is not a prominent concern. Columns 4–6 in table 1 present means of baseline variables in the treatment and control groups and their differences for this restricted follow-up sample. Means in the baseline and follow-up samples are similar. In the follow-up sample, three of 20 differences between treatment and control groups (age, indicator for working more than 8 hours per day, and indicator for having been injured at work) are statistically significant at the 10% level. The *F*-test in column 6 does not reject the joint equality of means between the two groups at conventional levels of statistical significance.

¹⁸ The site's goal is to create a more equitable job marketplace for FDWs. Both employers and FDWs can use the service for free and avoid paying employment transfer fees to middlemen (e.g., employment agencies) that can range from S\$400 to S\$600. The site also provides a forum for discussing issues faced by employers and workers, along with a list of basic skills training resources available to FDWs in Singapore.

¹⁹ This follow-up success rate of 60% is consistent with other migrant studies such as Ambler, Aycinena, and Yang (2015) and Ashraf et al. (2015). The latter study successfully tracked 57% of migrants from El Salvador living in Washington, DC, from the baseline. The follow-up rate in Ambler, Aycinena, and Yang (2015) is 73%. In our study, the FDWs we could not contact in the follow-up might have left the country, changed their phone number, or not have wanted to be reinterviewed. If we could not contact any FDW after more than 10 attempted calls, we sent a short text message to the same number stating our intention of contact for the follow-up survey. After sending the text, we tried calling at least 10 more times.

TABLE 3
RELATIONSHIP BETWEEN FDW BASELINE CHARACTERISTICS AND ATTRITION

	Coefficient (1)	Standard Error (2)	p-Value (3)
Age	-.006	.0062	.355
Married	-.045	.0701	.523
College graduate	-.122**	.0611	.047
Number of children	-.020	.0272	.456
Years in Singapore	-.010	.0070	.145
Years with current employer	.008	.0084	.360
Works more than 8 hours/day	-.065	.1538	.671
Monthly salary	-.000	.0003	.394
Vulnerable FDW	.061	.0694	.381
Sends remittances	.172	.1212	.159
Communicates with other FDWs	-.078	.0690	.260
High knowledge	.034	.0591	.565
Observations	303		
Mean dependent variable	.413		
F-test statistic			1.04
p-value			.412

Note. The sample includes all foreign domestic workers (FDWs) who were interviewed in the baseline (i.e., full sample). The dependent variable is a dummy variable that equals 1 if an FDW does not show up in the follow-up survey and 0 otherwise. The independent variables are demographic, employment, and knowledge characteristics of FDWs from the baseline survey. The estimated coefficients are reported in col. 1, the robust standard errors are reported in col. 2, and the *p*-values are reported in col. 3.

** $p < .05$.

Table 3 examines whether the attrition is correlated with FDW characteristics by regressing the indicator variable of whether FDWs show up in the follow-up sample on baseline characteristics. The estimated coefficients on all variables (except college graduate) are not statistically significant at conventional levels. Moreover, the *F*-test statistic at the bottom of column 3 cannot reject that the reported characteristics are jointly significant, providing no evidence of a potential self-selection into the follow-up sample on observed characteristics.²⁰

C. Empirical Specification

We estimate intention-to-treat effects of our information intervention by estimating ordinary least squares with the following specification:

$$Y_i = c + \gamma \text{Treatment}_i + X_i' \delta + \epsilon_i,$$

where Y_i is the outcome measure for individual i , Treatment_i is a binary indicator for treatment assignment of individual i , and X_i is a vector of

²⁰ In addition, the attrition rates are not different between high- and low-knowledge FDWs and between vulnerable and nonvulnerable FDWs. We also do not find differential attrition by treatment status in each of these four subsamples, for which we later estimate the treatment effects separately.

individual-level covariates. The covariates are included to improve estimation precision and to account for any chance differences between treatment and control groups in their baseline characteristics. Because we randomized at the individual level, the variable *Treatment*_{*i*} should be uncorrelated with the individual-specific error term ϵ_i .

The coefficient of interest in the regression is γ , and the causal impact of treatment on FDW outcomes is Y_i .

III. Results

We estimate the effect of the treatment on four types of outcomes: knowledge about labor laws related to job mobility, employment outcomes, intentions related to employment, and job search outcomes. For each set of outcome variables, we show treatment effects in the full (follow-up) sample in table 4. Treatment effects for subsamples of the data (partitioned by baseline knowledge and work conditions) are presented in table 5.

A. Average Treatment Effects

We initially discuss treatment effects in the full sample of FDWs that show up in the follow-up survey in table 4.

Panel A examines whether FDWs who received treatment had better knowledge of Singaporean labor laws related to job mobility at the time of the follow-up survey. We focus on three Singaporean laws that allow FDWs (*a*) to work in Singapore without using an agent, (*b*) to change employers without using an agent, and (*c*) to change employers without having to leave Singapore first.²¹

The results in panel A indicate that the treatment had a positive impact on respondents' knowledge of labor regulations related to FDW job transfers. We find large and positive treatment effects on correct answers for the first two questions, which are statistically significant at the 1% level. Impact for the third question is positive but small, and it is not statistically significant at conventional levels.

To account for the problem of multiple inference, we construct summary indexes that aggregate information over multiple treatment estimates, as in Kling, Liebman, and Katz (2007). The knowledge index in panel A, column 5, is calculated by taking an equally weighted average across the three knowledge

²¹ As mentioned earlier, knowledge of the fourth law, which requires FDWs to obtain approval from their current employer to request a transfer, was already very high in the baseline (95% of study participants). We drop this knowledge outcome from our analysis. Including this knowledge outcome in the analysis does not change the results on the knowledge index (table 4, col. 5) and the differential results by baseline knowledge in panel A of table 5.

TABLE 4
AVERAGE TREATMENT EFFECTS

	(1)	(2)	(3)	(4)	(5)
A. Knowledge Outcomes					
	Work without Agent	Change without Agent	Change without Leaving	No Data	Knowledge Index
Treatment	.315*** (.0706)	.317*** (.0681)	.0268 (.0574)		.220*** (.0500)
Mean dependent variable, control	.449	.506	.820		.592
B. Employment Outcomes					
	New Employer	Monthly Salary	Work Hours	Other Conditions	Employment Index
Treatment	.022 (.0451)	-.022 (.0790)	.093** (.0414)	.105*** (.0403)	.050* (.0291)
Mean dependent variable, control	.079	.483	.888	.876	.581
C. Intention Outcomes					
	Job Search	Monthly Salary	Work Hours	Rest Days	Intentions Index
Treatment	.162** (.0623)	.073 (.0733)	.008 (.0608)	.027 (.0465)	.068* (.0408)
Mean dependent variable, control	.112	.315	.135	.056	.154
D. Search Outcomes					
	New Employer	Multiple Employers	Channel besides Agent	Easy Process	Search Index
Treatment	.004 (.0557)	.014 (.0470)	.027 (.0345)	.019 (.0380)	.016 (.0365)
Mean dependent variable, control	.146	.090	.034	.056	.082
Observations	178	178	178	178	178

Note. The specifications control for demographic, employment, and knowledge characteristics of foreign domestic workers. The dependent variables in cols. 1–4 are dummy variables constructed from the self-reported outcomes in the follow-up survey. The indexes in col. 5 are constructed by taking an equally weighted average of the outcome dummy variables from cols. 1–4. Robust standard errors are reported in parentheses.

* $p < .1$.

** $p < .05$.

*** $p < .01$.

outcome indicator variables (equivalent to the share of the three questions answered correctly). The impact on the knowledge index is positive and significant at the 1% level. The impact of 0.220 on the knowledge index is large, amounting to 37.2% of the mean in the control group (0.592).

Impacts on employment outcomes are presented in panel B. Participants were asked during the follow-up survey whether their employment conditions

TABLE 5
HETEROGENOUS TREATMENT EFFECTS

	Knowledge Index (1)	Employment Index (2)	Intentions Index (3)	Search Index (4)
A. By Knowledge				
Treatment	.211*** (.0651)	.092** (.0375)	.056 (.0531)	.010 (.0475)
Treatment × high knowledge	.022 (.1110)	-.114* (.0637)	.031 (.0901)	.015 (.0806)
High knowledge	.148* (.0788)	.058 (.0454)	-.006 (.0642)	-.041 (.0575)
<i>p</i> -value of <i>F</i> -test: treat + treat × high knowledge	.007	.272	.213	.161
B. By Work Conditions				
Treatment	.257*** (.0560)	.020 (.0324)	.097** (.0456)	-.009 (.0409)
Treatment × vulnerable FDW	-.174 (.1180)	.138** (.0682)	-.137 (.0962)	.117 (.0861)
Vulnerable FDW	.041 (.0882)	-.109** (.0510)	.141* (.0719)	-.025 (.0644)
<i>p</i> -value of <i>F</i> -test: treat + treat × vulnerable FDW	.428	.010	.644	.161
Observations	178	178	178	178
Mean dependent variable, control	.592	.581	.154	.082

Note. The specifications control for demographic, employment, and knowledge characteristics of foreign domestic workers (FDWs). "High knowledge" is a dummy variable that equals 1 if an FDW correctly answers at least two of the three labor law questions in the baseline. "Vulnerable FDW" is a dummy variable that equals 1 if an FDW reports being paid late, working on rest days, or getting injured at work in the baseline. Robust standard errors are reported in parentheses.

* $p < .1$.

** $p < .05$.

*** $p < .01$.

had changed since the baseline. The treatment had positive impacts on FDWs' self-reported workload and other work conditions (excluding salary and work hours). Participants who received treatment are 9.3 percentage points more likely to report that their daily work hours declined or remained unchanged and 10.5 percentage points more likely to report that other work conditions improved or remained unchanged compared with those who did not receive treatment.²² The two effects are statistically significant at the 5% and 1% levels, respectively. However, treatment has no large or statistically significant impact on the likelihood of changing employers or of increasing monthly salary.

The positive impact on FDWs' work hours without decreasing their monthly salary suggests that the treatment increased their effective hourly wage. More

²² The other work conditions variable is likely to measure FDWs' ability to leave their employer's house at will and their access to information and external communications. According to Human Rights Watch (2005), freedom of movement and communication—along with salary and workload—are two aspects of their job about which most FDWs have complaints.

importantly, the treatment improved the aspects of household work that are relatively hard to monitor (compared with salary) and are therefore often excluded from their employment contract.

The effect on an employment index (the average of the dependent variables in table 4, cols. 1–4) is positive and statistically significant at the 10% level. The point estimate indicates an increase in the index of 0.05, which is not trivial in magnitude compared with the mean in the control group (0.581).

Panel C estimates the effect on FDWs' intentions to seek better employment conditions with employers. The dummy dependent variables indicate whether respondents chose a value of 5 or more on a 10-point scale (10 being extremely likely) to express their intentions to search for new employment, ask for higher salary, ask for better work hours, and seek more rest days in the near future.²³ The treatment increased the likelihood that FDWs reported they would seek new employment by 16.2 percentage points. The estimate is statistically significant at the 5% level and large with respect to the mean in the control group (11.2%). Impacts on other intention outcomes are also positive, and the magnitudes are not trivial compared with the means, but they are not statistically significant at conventional levels. Column 5 reports the impact on an index of intentions (the average of the dependent variables in cols. 1–4) and indicates that the treatment had a positive and statistically significant impact (at the 10% significance level) on FDWs' intentions to seek better work conditions. The effect on the intentions index (0.068) amounts to roughly a 50% increase over the mean in the control group (0.154).

Panel D reports impacts on job search behaviors. Columns 1, 2, and 3, respectively, report impacts on indicator variables of looking for a new employer, searching for multiple employers, and using alternate channels besides an employment agency to search. The fourth job search outcome is an indicator for the respondent reporting that job searching was an easy process. The information intervention had no effect on any of the search variables or on an index of job search (the average of the dependent variables in cols. 1–4).

B. Treatment Effects in Subsamples

To provide insights into the distributional effects of providing information on labor laws and job availability to FDWs, we now turn to analyses of impacts in subsamples. We first consider subsamples divided by initial knowledge of

²³ The results in table 4, panel C, are robust to using category variables (1–10) for the four measures of intention instead of the dummy variables. The results are provided in table A1.

labor laws and then turn to subsamples according to initial work conditions in panels A and B of table 5, respectively.

1. Subsamples by Initial Knowledge

We define “high knowledge,” as in table 1, as an indicator for respondents answering correctly at least two of the three questions about labor laws in the baseline survey. Panel A of table 5 estimates regressions where we add an indicator for treatment interacted with the indicator for high knowledge (the main effect for high knowledge remains included in the regression as a control variable). The coefficient on treatment then represents the treatment effect for those with low knowledge. The coefficient on the interaction term represents the difference in the treatment effect for those with high knowledge (compared with those with low knowledge). We also report the p -value of the F -test that the treatment effect for those with high knowledge (the sum of the coefficient on the treatment main effect and the coefficient on the interaction term) is statistically significantly different from 0.

We highlight heterogeneity in the treatment effect on the four indexes of knowledge, employment, intentions, and search outcomes.²⁴ Results in panel A indicate that impact on employment conditions is larger among those with low initial knowledge. For the employment index outcome variable in column 2, the main effect (impact of treatment for the initially low-knowledge group) is positive and statistically significant at the 5% level, whereas the F -test cannot reject that the treatment effect among the high-knowledge group is 0. Moreover, we can reject at conventional statistical significance levels that the treatment effect is the same in the low- and high-knowledge subsamples: the interaction term is negative and statistically significant at the 10% level.

Results in column 1 indicate that the treatment effect on knowledge is large and positive for respondents with baseline low knowledge. The coefficient on the treatment main effect for the knowledge index is statistically significant at the 1% level. The treatment \times high knowledge interaction term is close to 0, and it is also not statistically significant. The F -test can reject at conventional levels that the treatment effects for initially high-knowledge respondents are 0. For the intentions and search indexes in columns 3 and 4, the treatment effects are not statistically different from 0 for both low- and high-knowledge subsamples.

²⁴ The heterogeneous treatment effect estimates on the full sets of outcome variables are presented in tables A2–A5.

2. Subsamples by Initial Work Conditions

It is natural to suppose that workers with initially worse working conditions would be more responsive to the treatment, as they would likely have greater potential gains from changing jobs or from negotiating with their current employers for better conditions. We therefore now turn to exploring heterogeneity in treatment effects according to baseline work conditions. As discussed previously, Singaporean labor law requires employers to pay FDWs on time, allow one rest day a week, and provide a safe working environment. We categorized FDWs as vulnerable if they reported in the baseline that at least one of these conditions was not fulfilled by their current employer. These vulnerable FDWs comprise slightly more than 20% of our sample. Results are given in panel B of table 5.

Results for the employment index in column 2 indicate that the treatment effect is larger for vulnerable respondents. The treatment effect for the nonvulnerable is 0.020 (not statistically significant), whereas that for the vulnerable (the sum of the treatment main effect and interaction term coefficients) is 0.158 and statistically significant at the 1% level. The coefficient of the treatment \times vulnerable FDW interaction term is positive and statistically significantly different from 0 at the 5% level. It is also striking that, unlike the results for the full sample in table 4, the treatment leads vulnerable FDWs to be more likely to change employers (see table A3, panel B, col. 1). The treatment effect on the new employer outcome for vulnerable FDWs amounts to 17.0 percentage points, with a p -value of .073.

Results in column 3 indicate that the effect on FDWs' intentions index is close to 0 and is statistically insignificant at conventional levels among vulnerable FDWs. For nonvulnerable FDWs, however, the effect is positive and statistically significant at the 5% level. (That said, the difference in the treatment effect between the two groups is not statistically significant at conventional levels.)

Taken together with the heterogeneous treatment effect estimates on employment outcomes, the results suggest differences in the timing of action between the vulnerable and nonvulnerable FDWs in response to treatment. Treatment led to an immediate response on switching to a new employer and improving employment conditions by vulnerable FDWs. Nonvulnerable FDWs who received treatment reported raised intentions to improve their conditions in the future, including to switch employers (see table A4, panel B, col. 1), but do not report having done so yet at the time of the follow-up survey. This result makes sense in that vulnerable FDWs would presumably feel greater urgency to improve their situations compared with nonvulnerable FDWs.

Results in column 1 indicate that the effect on the knowledge index of vulnerable FDWs is positive (though not statistically significant). For nonvulnerable FDWs, the effect on the knowledge index is also positive and statistically significant but not statistically significantly different from vulnerable FDWs. In column 4, the treatment effect on the search index among vulnerable FDWs is positive, but it is not statistically significant at conventional levels, whereas the effect on the nonvulnerable subgroup is close to 0 and also not statistically significant.

IV. Conclusion

In a sample of Filipino migrant workers working as domestics (maids) in Singapore, we conducted a randomized controlled trial testing the impacts of providing information related to job mobility. The treatment provided information on workers' legal rights to change employers and access to actual job listings. We found positive impacts on knowledge about legal rights related to job mobility, employment conditions, and intentions to improve employment conditions in the future. Subsample analyses reveal magnified effects in migrants with initially (pretreatment) low knowledge of their legal rights and who were "vulnerable" in the sense of having experienced poor working conditions at baseline. The subpopulation of vulnerable workers also became more likely to change employers in response to the treatment. These results reveal the empirical relevance of imperfect information as a market failure influencing employment outcomes in a labor market for migrant workers.

From a policy standpoint, there is substantial concern on the part of governments in migrant-origin countries and nongovernmental organizations that migrant legal rights are poorly protected. Ruhs (2013) emphasizes that national interests of migrant-destination countries often undermine an expansion of migrant rights. Our findings identify a simple intervention (i.e., providing information) that could improve employment outcomes of migrant workers, especially those who are poorly informed and vulnerable to exploitation, even when it is not possible to alter the legal status quo related to migrant job transitions. That said, our findings apply most directly to labor markets (e.g., Singapore) where migrant job mobility is relatively unrestricted but where this may not be completely known by migrants.

Our results also reveal that labor mobility more generally has an important effect on the employment conditions of migrant workers. Many migrant-dominated occupations in developed countries, including domestic work, are characterized by fixed-length contracts and work permits that tie workers to their employers. Although rapid expansion of these sectors has allowed large

numbers of workers from developing countries to seek lucrative employment opportunities, our results are consistent with the findings of Naidu, Nyarko, and Wang (2016) and suggest that reforming labor laws that govern work contracts and conditions could further increase migrants' benefits from such employment.

There are important aspects of information constraints that are not explored in this paper, in particular the role of social networks. In our endline survey, more than 70% of treated FDWs reported sharing information on legal rights and job openings with friends. We view more detailed examination of the nature and extent of such information flows within social networks as an important area for future research, which we intend to explore.

Appendix

DOMESTIC WORKERS: KNOW YOUR RIGHTS

FDWs can work in
Singapore WITHOUT
using an agent

FDWs can change
employer WITHOUT
using an agent

FDWs can change
employer WITHOUT
leaving Singapore

FDWs can change
employer with
NO fee

For more information, visit:

<http://www.mom.gov.sg/Documents/services-forms/passes/WPSPassConditions.pdf>

To report any violation, visit:

<http://www.mom.gov.sg/contact-us/Pages/report-to-us.aspx>

WHAT DOES THE LAW SAY?

The Ministry of Manpower gives you the legal right to request for transfer to any new employer of your choice, if:

- Your current Work Permit is still valid for 30 days or more
- Your passport is valid for at least 7 months
- Your current employer approves your transfer to a new employer

You can find more information at the Ministry of Manpower website:

www.mom.gov.sg/foreign-manpower/passes-visas/work-permit-fdw/inform-mom/

WHAT DO YOU NEED TO DO?

The transfer process is EASY and FREE.

- Your new employer will submit a new Work Permit application on your behalf to the Ministry of Manpower
- Your current employer must complete Part 5 of the Work Permit application to give his/her consent for the transfer
- Once your application is approved, you can collect your new Work Permit by visiting the Work Pass Service Center located at Tanjong Pagar Complex, 7 Keppel Road #02-27/29

The application form can be downloaded at:

http://www.mom.gov.sg/Documents/services-forms/passes/WP_Appln_Form_for_FDW.pdf

WHERE TO FIND NEW EMPLOYERS?

[dwjobs.org](http://www.dwjobs.org) is a FREE website with:

- Daily information on the large number of employers in Singapore seeking to hire domestic workers
- Detailed job descriptions including wages and contact numbers for you to call

You can also access all these ads on DWjobs Facebook page: www.facebook.com/dwjobs

Figure A1. Information flyer.

JOB POSTING 1: Domestic helper on Transfer Needed Immediately
Contact Number: [REDACTED]
Salary: S\$ 520
Property Type: Landed
Area: [REDACTED]
Skills Required: Cooking, Housekeeping
Description: Good & total housekeeping and some cooking for family of 4 adults. Prefer English speaking, honest, committed, clean and hardworking, off-day every week, own room this bathroom.

JOB POSTING 2: Filipino Helper Needed
Contact Number: [REDACTED]
Salary: S\$ 520
Property Type: Landed
Area: [REDACTED]
Skills Required: Marketing, Cooking, Housekeeping
Description: Able to communicate in English, Independent, and Honest.

JOB POSTING 3: Looking for a Transfer Helper
Contact Number: [REDACTED]
Salary: S\$ 500 - 4
Property Type: Landed
Area: [REDACTED]
Skills Required: Elder Care, Marketing, Cooking
Description: A local family of six adults staying in 3 storey landed house around [REDACTED] area looking for a transfer helper. She is required to do mainly the household chores and preferably able to cook well. Ability to speak a little mandarin will be an added advantage. Willing to pay to a good, honest and hardworking helper! Interested please call Raymond Ho [REDACTED]

JOB POSTING 4: Looking for a Helper Who Has Got Good Cooking Skills
Contact Number: [REDACTED]
Salary: Negotiable
Property Type: Condo
Area: [REDACTED]
Skills Required: Cooking
Description: I'm looking for a helper which is good in cooking and baking, call me if you are [REDACTED] thank you.

JOB POSTING 5: Australian Expat Family Looking for Help
Contact Number: [REDACTED]
Salary: S\$ 550 - 650
Property Type: [REDACTED]
Area: [REDACTED]
Skills Required: Child Care, Pet Care, Housekeeping, Infant Care
Description: Australian family new to Singapore with a net dog, an 18 month old boy and a baby due in August. We have recently moved into a 5 bedroom landed property on the [REDACTED] and are seeking assistance in the following duties: Infant Care of our new baby, Child Care of our 18 month old son; housekeeping (including ironing); Marketing and cooking. We are looking for a helper who has at least two years experience with infant and child care (a must); is good with dogs; Has a happy nature and loves children; Speaks english well; Has at least 4 years experience (some part time) in housekeeping; Has experience in marketing and cooking; and is available to work on public holidays are off. Previous employer references are required. If you are interested please contact me via the following with your name and transfer date and we will contact you soon regarding an interview, email: [REDACTED] or Phone: [REDACTED] or Text: [REDACTED] Regards, [REDACTED]

JOB POSTING 6: Looking for Helper Who Enjoys Taking Care of Young Children
Contact Number: [REDACTED]
Salary: S\$ 520 - 600
Property Type: Other
Area: [REDACTED]
Skills Required: Child Care, Pet Care, Housekeeping, Cooking
Description: We are looking for a helper who enjoys looking after young children. We are family with 2 active children aged 1 & 2.5 and a cute toy dog. Start date can be end July or early August 2015. Prefer helper with reference from current/former employer, 1 day off per week. Please sms me at [REDACTED] with the following info if you are interested to meet up for an interview, Name, Nationality, NYP #, and General info about you. Thank!

JOB POSTING 7: Family Looking for Suitable Helper
Contact Number: [REDACTED]
Salary: S\$ 500 - 550
Property Type: Condo
Area: [REDACTED]
Skills Required: Child Care, Housekeeping, Cooking, Marketing
Description: Small family looking for helper with the following criteria: (1) Able to handle and care for children (9 yr and 12 yr); (2) Responsible and Independent; (3) Organised and Honest; (4) Have experience working with family where both parents are working. If you have the above qualities, please sms me with your current and past experience. Thanks

JOB POSTING 8: Looking for Trustworthy Helper
Contact Number: [REDACTED]
Salary: S\$ 500 - 600
Property Type: Condo
Area: [REDACTED]
Skills Required: Infant Care, Housekeeping, Marketing, Cooking
Description: We are a lovely Singaporean Chinese couple with a newborn living in a 3 bedroom condo in Serangoon. We are looking for a honest and trustworthy helper who has also some of the following skills: (1) Good in housework, (2) Good in general household chores, very clean & organized; (3) Quick learner & flexible; (4) good budget/marketing skill and able to cook; (5) reference and recommendation letter from current/former employer will be a plus; Weekly salary off and salary will commensurate with experience. We prefer the helper to start ASAP but can be flexible. Please sms me at [REDACTED] or you may contact me direct. Thank you. [REDACTED]

JOB POSTING 9: Transfer Filipino/Indonesian Helper Needed
Contact Number: [REDACTED]
Salary: S\$ 500
Property Type: Other
Area: [REDACTED]
Skills Required: Housekeeping, Cooking, Marketing, Elder Care
Description: At least 2 years working experience in SG. Able to communicate in English, Independent

JOB POSTING 10: Seeking Transfer Maid
Contact Number: [REDACTED]
Salary: S\$ 450
Property Type: HDB
Area: [REDACTED]
Skills Required: Elder Care, Housekeeping, Cooking, Marketing
Description: Looking for good and trustworthy maid to do general housework and look after aged lady. Must be hardworking, honest, tidy and willing to learn to cook area of independent disposition.

Many More Up to Date Job Advertisements Available at dijobs.org

Figure A2. Sample of a job-posting flyer. The personal contact information in the figure has been blacked out for privacy reasons. This information was visible to participants of the study.

TABLE A1
AVERAGE TREATMENT EFFECTS ON INTENTION OUTCOMES (CATEGORY VARIABLES)

	Job Search (1)	Monthly Salary (2)	Work Hours (3)	Rest Days (4)	Intentions Index (5)
Treatment	1.074** (.4750)	.766 (.5810)	.256 (.4500)	.430 (.3640)	.632* (.3210)
Observations	178	178	178	178	178
Mean dependent variable, control	3.079	4.292	2.393	2.000	2.941

Note. The specifications control for demographic, employment, and knowledge characteristics of foreign domestic workers (FDWs). The four category variables (cols. 1–4) take the values between 1 and 10, for “Job Search,” 10 being extremely likely that an FDW will search for a new employer in the next 6 months; for “Monthly Salary,” 10 being extremely likely that an FDW will ask for a higher salary in the next 3 months; for “Work Hours,” 10 being extremely likely that an FDW will ask for better working hours in the next 6 months; and for “Rest Days,” 10 being extremely likely that an FDW will ask for more rest days in the next 3 months. “Intentions Index” is an equally weighted average of the four intention outcome variables. Robust standard errors are reported in parentheses.

* $p < .1$.

** $p < .05$.

TABLE A2
HETEROGENOUS TREATMENT EFFECTS ON KNOWLEDGE OUTCOMES

	Work without Agent (1)	Change without Agent (2)	Change without Leaving (3)
A. By Knowledge			
Treatment	.342*** (.0919)	.290*** (.0886)	.003 (.0747)
Treatment × high knowledge	−.070 (.1560)	.073 (.1500)	.064 (.1270)
High knowledge	.215* (.1110)	.102 (.1070)	.128 (.0905)
<i>p</i> -value of <i>F</i> -test: treat + treat × high knowledge	.026	.002	.496
B. By Work Conditions			
Treatment	.347*** (.0794)	.311*** (.0767)	.114* (.0630)
Treatment × vulnerable FDW	−.147 (.1670)	.029 (.1620)	−.403*** (.1330)
Vulnerable FDW	.043 (.1250)	−.089 (.1210)	.168* (.0992)
<i>p</i> -value of <i>F</i> -test: treat + treat × vulnerable FDW	.181	.020	.015
Observations	178	178	178
Mean dependent variable, control	.449	.506	.820

Note. The specifications control for demographic, employment, and knowledge characteristics of foreign domestic workers (FDWs). “Work without Agent” is a dummy variable that equals 1 if an FDW correctly answered that FDWs can work in Singapore without using an agent. “Change without Agent” is a dummy variable that equals 1 if an FDW correctly answered that FDWs can change employers without using an agent. “Change without Leaving” is a dummy variable that equals 1 if an FDW correctly answered that FDWs can change employers without leaving Singapore. Robust standard errors are reported in parentheses.

* $p < .1$.

*** $p < .01$.

TABLE A3
HETEROGENOUS TREATMENT EFFECTS ON EMPLOYMENT OUTCOMES

	New Employer (1)	Monthly Salary (2)	Work Hours (3)	Other Conditions (4)
A. By Knowledge				
Treatment	.024 (.0587)	.053 (.1020)	.181*** (.0787)	.110** (.0525)
Treatment × high knowledge	-.004 (.0996)	-.201 (.1740)	-.236*** (.0896)	-.013 (.0891)
High knowledge	-.041 (.0710)	.134 (.1240)	.149** (.0639)	-.011 (.0636)
<i>p</i> -value of <i>F</i> -test: treat + treat × high knowledge	.799	.272	.432	.161
B. By Work Conditions				
Treatment	-.019 (.0503)	-.037 (.0890)	.061 (.0463)	.073 (.0451)
Treatment × vulnerable FDW	.189* (.1060)	.069 (.1870)	.148 (.0975)	.148 (.0950)
Vulnerable FDW	-.067 (.0792)	-.085 (.1400)	-.175** (.0729)	-.109 (.0710)
<i>p</i> -value of <i>F</i> -test: treat + treat × vulnerable FDW	.073	.848	.017	.010
Observations	178	178	178	178
Mean dependent variable, control	.079	.483	.888	.876

Note. The specifications control for demographic, employment, and knowledge characteristics of foreign domestic workers (FDWs). “New Employer” is a dummy variable that equals 1 if an FDW reports that she changed employers since the baseline. “Monthly Salary” is a dummy variable that equals 1 if an FDW reports that her monthly salary increased or remained unchanged since the baseline. “Work Hours” is a dummy variable that equals 1 if an FDW reports that her daily work hours decreased or remained unchanged since the baseline. “Other Conditions” is a dummy variable that equals 1 if an FDW reports that other aspects of her work improved or remained unchanged since the baseline. Robust standard errors are reported in parentheses.

* $p < .1$.

** $p < .05$.

*** $p < .01$.

TABLE A4
HETEROGENOUS TREATMENT EFFECTS ON INTENTION OUTCOMES

	Job Search (1)	Monthly Salary (2)	Work Hours (3)	Rest Days (4)
A. By Knowledge				
Treatment	.177** (.0811)	.105 (.0954)	-.057 (.0787)	-.001 (.0604)
Treatment × high knowledge	-.039 (.1380)	-.085 (.1620)	.173 (.1340)	.075 (.1030)
High knowledge	.040 (.0982)	.145 (.1150)	-.115 (.0953)	-.094 (.0731)
<i>p</i> -value of <i>F</i> -test: treat + treat × high knowledge	.197	.874	.260	.352
B. By Work Conditions				
Treatment	.212*** (.0697)	.080 (.0826)	.059 (.0679)	.038 (.0523)
Treatment × vulnerable FDW	-.229 (.1470)	-.035 (.1740)	-.232 (.1430)	-.052 (.1100)
Vulnerable FDW	.234** (.1100)	.120 (.1300)	.126 (.1070)	.084 (.0824)
<i>p</i> -value of <i>F</i> -test: treat + treat × vulnerable FDW	.895	.769	.176	.891
Observations	178	178	178	178
Mean dependent variable, control	.112	.315	.135	.056

Note. The specifications control for demographic, employment, and knowledge characteristics of foreign domestic workers (FDWs). “Job Search” is a dummy variable that equals 1 if an FDW reports that she is likely to search for a new employer in the next 6 months. “Monthly Salary” is a dummy variable that equals 1 if an FDW reports that she is likely to ask for a higher salary in the next 3 months. “Work Hours” is a dummy variable that equals 1 if an FDW reports that she is likely to ask for better working hours in the next 6 months. “Rest Days” is a dummy variable that equals 1 if an FDW reports that she is likely to ask for more rest days in the next 3 months. Robust standard errors are reported in parentheses.

** $p < .05$.

*** $p < .01$.

TABLE A5
HETEROGENOUS TREATMENT EFFECTS ON SEARCH OUTCOMES

	New Employer (1)	Multiple Employers (2)	Channel besides Agent (3)	Easy Process (4)
A. By Knowledge				
Treatment	-.010 (.0725)	.009 (.0612)	.050 (.0449)	-.007 (.0494)
Treatment × high knowledge	.037 (.1230)	.014 (.1040)	-.061 (.0762)	.069 (.0839)
High knowledge	-.097 (.0878)	-.011 (.0741)	.020 (.0544)	-.077 (.0598)
p-value of F-test: treat + treat × high knowledge	.776	.781	.855	.342
B. By Work Conditions				
Treatment	-.028 (.0626)	-.005 (.0529)	.013 (.0388)	-.018 (.0424)
Treatment × vulnerable FDW	.146 (.1320)	.088 (.1110)	.066 (.0818)	.170* (.0893)
Vulnerable FDW	.032 (.0986)	-.037 (.0833)	-.019 (.0612)	-.075 (.0668)
p-value of F-test: treat + treat × vulnerable FDW	.315	.406	.278	.059
Observations	178	178	178	178
Mean dependent variable, control	.146	.090	.034	.056

Note. The specifications control for demographic, employment, and knowledge characteristics of foreign domestic workers (FDWs). “New Employer” is a dummy variable that equals 1 if an FDW reports that she searched for a new employer since the baseline. “Multiple Employers” is a dummy variable that equals 1 if an FDW reports that she searched for more than one employer since the baseline. “Channel besides Agent” is a dummy variable that equals 1 if an FDW reports that she searched using channels other than her employment agency. “Easy Process” is a dummy variable that equals 1 if an FDW reports that her search experience was very easy. Robust standard errors are reported in parentheses.

* $p < .1$.

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