# IMPROVING THE EFFECTIVENESS OF JOB FAIRS FOR YOUNG JOBSEEKERS IN EGYPT

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# 1. Executive summary

This project aims to study how we can use job fairs to improve outcomes for young jobseekers. In particular, we focus on the information and financial constraints that limit the attendance of jobseekers in job fairs and what we can do to improve matching between jobseekers and employers. We accomplish this through a combination of randomized experiments, quantitative data collection and analysis, and qualitative field research.

The project is divided into six main stages:

- (1) Pre-pilot qualitative data collection
- (2) Pre-pilot quantitative street-level survey
- (3) Implementation of the first set of RCTs
- (4) Data collection after recruiting for the job fair and after the implementation of the job fair itself
- (5) Adjusting to COVID-19 realities and implementing a new set of RCTs
- (6) The final analysis; reporting and disseminating the results as well as working with the partner to improve labor market policies to help match jobseekers with employers.

Our initial aim was to better understand the constraints that led to the low utilization of job fairs in Egypt, a country where the unemployment rate has reached 9.8%, and where females continue to be disproportionately affected by high unemployment. In 2018, female unemployment had reached 23%, while male unemployment was at 6.8%. Despite the high proportion of unemployed youth searching for jobs, many companies face labor shortages, with tens of thousands of their vacancies remaining unfilled. According to the 2012 African Economic Outlook Report, companies were not able to fill more than 600,000 vacancies.

This gap can be attributed to several factors, including information frictions in the form of a lack of knowledge about existing job fairs, job quality, and transportation costs. In our street-level survey conducted in the pre-pilot stage, described in the upcoming sections, we find that only 16%

<sup>&</sup>lt;sup>1</sup> International Labour Organization, ILOSTAT database.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> African Economic Outlook Special Theme: Promoting Youth Employment (2012). *African Development Bank, Organisation for Economic Co-operation and Development, United Nations Development Programme, United Nations Economic Commission for Africa*. <u>Link</u>

of the sample are familiar with what a job fair is, confirming the existence of a knowledge gap. In terms of job quality, informal employment in Egypt increased from 43% to 54% between 2010 and 2018.<sup>4</sup> These informal jobs do not have formal contracts, do not have social or medical insurance, and are not considered to be "decent jobs". According to the ILO, a decent job "involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men". Furthermore, as part of Egypt's Economic Reform Plan, subsidies on fuel have been gradually reduced since 2014 and were totally diminished by 2019, and the price for the metro and other types of public transportation have also increased. Such conditions have led to pressing economic burdens on jobseekers as the cost of job search has increased with the recent increase in transportation costs.

In our experiment, we aimed to bridge the mismatch between jobseekers and employers and mitigate job search obstacles through improving job matching in job fairs.

Before designing an RCT we took several steps to gather information to inform the design of the eventual study. This began with qualitative interviews that revealed that among the few dozens of people we spoke to there was a concern about the fairness of the job market, a lack of awareness of what job fairs are and how they could be useful, and a concern about geographical mismatch. We also spoke with firms who complained about the difficulty of attracting talent and the importance of recruiting individuals who live close to the place of work, as employees who live far away are less likely to stay on the job for a long time.

We used the knowledge gained from these qualitative interviews with jobseekers and employers to design a quantitative survey that would allow us to get a better sense of how widespread these views were in the population of jobseekers that we were targeting. We implemented a survey on 1,561 jobseekers across 5 different governorates in Egypt. We found that only 16% of the individuals we surveyed knew what job fairs were about and that the vast majority of people used friends and family as their primary way to look for jobs. This implies an important information

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 $<sup>^{\</sup>rm 4}$  International Labour Organization, ILOSTAT database.

friction that could be addressed directly. We also found that people claimed to value jobs that provide benefits and a decent work environment.

During this time, we also struggled with the dissolution of our main government partner, the Industrial Training Council (ITC). The ITC was taken over by a new government organization called the Micro Small Medium Enterprise Development Agency (MSMEDA). While a fundamental part of the ITCs mission was to implement large government-sponsored job fairs, the merge with MSEMEDA led to a prolonged period of uncertainty which eventually culminated in MSMEDA's decision to no longer sponsor job fairs. This left us in a position of looking for other entities that ran job fairs in the country.

We had wide ranging conversations with governmental institutions, non-governmental institutions, and private entities to identify suitable partners after the dissolution of the ITC. We eventually partnered with different community development associations (CDA's), one of which is called the "National Employment Pact" (NEP), who have had a lot of success in matching jobseekers to employers. Later, we also found a great partner in a private company called "Shaghalni", as well as in another private company called "JobMaster". Both of these private companies were putting on job fairs that we were able to participate in.

Using the insights gained in our qualitative and quantitative work, we moved to piloting a research design for an experiment where we would invite individuals to a "jobs information session" with the intent of randomizing the information provided in the different groups who attended those sessions. We faced great difficulty in actually getting individuals to attend the sessions, despite providing them with financial incentives for attendance and partnering with local CDA's who have a stronger reputation in their communities. With NEP, we attempted to recruit people to information sessions using both street-level recruitment as well as running randomized digital advertising campaigns. We ran digital advertising campaigns using Facebook, Google Ads, and mass SMS outreach. In each case, we found that attendance to these information sessions was low. This required us to move on from that research design and explore other options.

When we learned that our partner, Shaghalni, was putting on a job fair we decided to try to utilize a door-to-door recruitment strategy. We trained surveyors to go into a building and knock on doors

to inquire if there were any young jobseekers who lived at the residence. If so then they would take down that individual's information and would randomize them into one of 4 main information groups: (1) the first group would get information about an impending job fair, (2) the second group would get information about the job fair as well as about the wages of the jobs available at the fair, (3) the third group would get information about the fair and the wages and was further told that all of the employers provide social insurance and "decent jobs", and (4) a fourth group would serve as a control group and would not get any information about the job fair. We also crosscut the three information treatments by providing a random half of the people with vouchers that they could redeem at the job fair to cover the costs of their transportation. We randomized at the building level to protect from any potential information spillovers between jobseekers living in the same building. We then collected data at the job fair about everyone who attended and matched their attendance with our baseline data to estimate the impact of our treatments on job fair attendance. We implemented this design at three different job fairs, giving us a total sample of 7,256 jobseekers that we included in our baseline sample.

We find that across the whole sample only 3.5% of individuals in the control group attended the fair. When we compare that to those in treatment 1, who are given only basic information about the existence of the fair, we find an increase of 4.7 percentage points in attendance, which is a 134% increase. We then split the analysis by gender and find that attendance of women in the control group was lower than men, with only 2.4% of women attending relative to 4.1% of men. At the same time, the impact of basic information on women was greater, with a 5.1 percentage point increase (a 212% increase relative to control), and a 4.4 percentage point increase for men (a 107% increase relative to control). This showcases that basic information frictions are an important part of the reason why job fairs aren't as well attended as the organizers would have liked.

Next, we estimated the impact of providing people with information about the wages of the jobs that are available at the job fair. We find a similar increase in attendance for individuals in the "info+wages" group, although slightly larger. We then estimated the marginal difference of the wages treatment relative to the "basic info" group and found that providing information on wages only increased attendance by 0.6 percentage points on averagewhich add and that this difference was not statistically significant. We then considered the third information treatment, which

additionally provided people with information about how the jobs available at the fair were "decent jobs". To our surprise, we found that this additional information, although intended to be a positive addition, actually led to a decrease in attendance on average. When split by gender, we found that the negative impact was concentrated among men.

Finally, we considered the impacts of providing people a travel voucher for fair attendance. We found a strong positive impact in using the travel voucher, with a 5.1 percentage point increase on average, which is relatively similar across both men and women. This estimated impact is very similar in magnitude to the impact of the basic information treatment.

This implies that information frictions are as big a constraint as monetary constraints in job fair attendance. It is not that one type of friction is the main driver of low attendance, but that both types together have large impacts. Since the voucher treatment was cross-randomized with the information treatment this means that those people who got both the information and the voucher increased their job fair attendance by 9.8 percentage points (a 280% increase relative to control), which is a 10.0 percentage point increase for women (416% increase relative to control) and a 9.7 percentage point increase for men (a 236% increase relative to control).

We collected baseline data on beliefs and expectations about job fairs and the the labor market so that we could try to understand the reasons behind the impacts we would find. We find that those who had accurate expectations to begin with do not differ in their attendance rates relative to those who got information only. On the other hand, those who had lower expectations than reality were more likely to go to the job fair when compared to those same people in the group that only got basic information on the fair. This implies that information does not have a uniform impact on jobseekers but interacts with their existing beliefs. We find no significant differences for individuals whose expectations were higher than reality, although the point estimates are in the opposite direction than we anticipated.

We implemented a follow-up survey by phone within two weeks to a month from the fair date. The intent was to see how the fair changed people's actions and beliefs in the short term. Data from over 4,000 surveys show positive but insignificant impacts on overall employment in the short-term. On the other hand, we see a decrease in the length of time people have been at their jobs, implying that people may have switched jobs during the month or so between the fair and the follow-up survey. This is strongest for those in the "decent job info" group. We see negligible

impacts on income, job search, or reservation wages. Still, we do find that individuals were more likely to apply for jobs and got slightly more job offers.

We intended to implement a 12-month follow-up survey so we can see what the impacts of increased job fair attendance were on labor market outcomes, but, just as we were about to go into the field (March 2020), we needed to stop field work due to the emergence of the COVID-19 pandemic. We then took the opportunity to pivot away from looking at long term impacts (since we expect that any results found would reflect the abnormal pandemic labor market as opposed to a labor market in equilibrium) and instead spent time working to understand how COVID-19 affected the market and what we could do to help decrease new frictions that may have arisen, in a safe way.

We implemented phone surveys on jobseekers, firms that specialize in matching employers and employees, and private sector firms who were affected by COVID-19. We found that the labor market was hit hard, with many people losing their jobs or having significantly reduced hours. Jobseekers were less worried about the health risks of the pandemic and more worried about the inability to work. Matchmaking entities changed their method of work so that they could match employees and employers using virtual methods such as zoom-interviews and virtual job fairs. Employers were forced to cut labor due to a large decrease in demand for goods and were only hiring to make up for any losses of critical employees.

We found an opportunity to run a nimble RCT with one partner, Shaghalni. The partner said that, even for the job opportunities they had, they struggled to bring in individuals who applied for the job to actually attend the interview. To that end we again tried to see if the reason for the low take-up was due to information or financial constraints. Given a set of applicants to a job, we implemented a 3x2 research design. One group was given 200 EGP to attend the interview, another was given 100 EGP to attend the interview, and the third group was not incentivized. We crosscut those groups with an information intervention about the number of individuals who were getting shortlisted for the job. We ran this experiment on 322 job applicants and found that, while the monetary incentives increased attendance, there was no difference between the 100 EGP and 200 EGP incentives. The information increased attendance but this difference was not statistically significant.

With these findings in hand, we intend to produce an academic paper for submission to a scientific journal within the coming year. We also intend to produce a policy brief that can be shared publicly and engage with policymakers interested in improving the function of the labor market with whom we can share our results.

# 2. Pre-pilot Activities

## 2.1 Focus groups

We conducted six focus groups for stage 1 of the research project. The total number of participants was 37, of whom 16 were males and 21 were females. Two focus groups were conducted with unemployed youth at the Industrial Training Council (ITC), where participants were recruited through the ITC database (ITC was our original partner before its merger into MSMEDA; details of the merger and partnerships can be found in section 7). Another two focus groups were conducted in Al Ta'awon, an NGO in Shubra aimed at providing support for small and mediumscaled industries. The final two focus groups were conducted in two factories in the city of Kafr Shukr, in Qalyubia governorate. The visit to Kafr Shukr was particularly interesting because the two factories were part of a governmental initiative called "Shoghlak Ganb Beitak" (translated as "work close to home"). The idea behind the initiative is that the government had incentivized factory owners to open new factories near the residential villages in Qalyubia. The key takeaways from the six focus group discussions are the following: (i) the participants are overall discouraged by the labor market and their current methods in searching for a job; (ii) the participants are not utilizing job fairs to find employment; (iii) the participants lack understanding on the general requirements of a job (less benefits, lower salaries, necessary English language, location); (iv) the participants do not trust the general process of job searching; and (v) the participants are discouraged because they believe that they have to travel far to go to work.

## 2.2 Firm in-depth interview

We conducted 11 in-depth interviews with HR representatives in firms located in Cairo, Alexandria, and Mahalla. Our interviews mainly focused on employee retention, firm benefits provided to employees, and, where applicable, gender-specific jobs. Firms interviewed ranged from large international firms to small local ones. They also varied in terms of location, where

some offered jobs at highly populated regions at the center of the cities, and others offered remotely-located jobs in new industrial zones or jobs that required employee relocation.

What we found to be common amongst all firms, with very few exceptions, was their inability to headhunt skilled employees for their jobs. Complaints regarding the lack of work ethics, low productivity, and high turnover rates were repetitive. A lot of them used internal referrals as their main method of recruitment, in addition to newspaper ads and job fairs. HR representatives agreed that most youth look for white-collar desk jobs that might not match their skills and qualifications or that might not necessarily be available.

Location was also an important aspect where one firm that did not suffer from high turnover rates expressed that this has become a problem for their new factory, which was located in the remote area of Borg El Arab. Although accommodation was provided, employees still did not stay in their jobs.

Overall, it seemed that salaries offered were within the market range of 1,500 and 2,500 EGP. While this might be relatively low compared to informal jobs, it is compensated by other benefits such as social insurance and job security.

#### 2.3 Mahallah Job fair

As an additional opportunity to learn about job fairs, we attended a job fair at Mahalla organized by our partner, ITC. Eighty percent of the vacant jobs were located outside of Mahallah. This created a problem as jobseekers attending the Mahallah job fair seemed to prefer jobs in Mahallah. This problem increases for the female population that faces cultural barriers in Egypt when considering jobs that are far from home.

This experience made it clear that the geographic location of the jobs at a job fair was going to be a primary determinant of the success of the job fair. Job fairs can achieve a higher number of local firms participating if awareness is increased in the city that will host the job fair and if local firms are targeted to partake in the job fairs.

# 2.4 Street-level survey

To further understand the nature of job-searching among our intended sample, we implemented a large street-level survey. Our survey covered 1,561 respondents, mostly at the early stages of their careers, with 0-3 years of experience. We implemented the survey in Cairo, Alexandria, Suez, Minya, and Fayoum.

We focused on three main components in the survey: (i) job search methods, (ii) job fair familiarity, and (iii) understanding of "decent jobs" as a concept.

#### Job search

- o Approximately 49% of our sample across all governorates were jobseekers.
- Over 93% of respondents across all governorates looked for jobs through their friends and family. Online job portals and direct applications at companies were the second most common job search methods. A very small portion used job fairs in their job-searching journey (less than 3%).

#### • Job fairs

- Only 16% were familiar with what a job fair is; clarifying that there is an important information friction about job fairs for the average young jobseeker.
- The main barriers preventing people from attending job fairs were (i) the lack of publicity, (ii) lack of confidence in finding a job at a job fair, (iii) transportation, and (iv) unfamiliarity with the types of jobs offered.
- o Transportation was considered to be the highest cost of attending a job fair.
- When asked about information that would encourage respondents to attend, 54% of respondents mentioned information on salaries offered, followed by companies recruiting and number of vacancies (35% and 34%, respectively).

#### Decent job

- When respondents were asked to choose their preference between a good salary with no benefits or an average salary with job benefits, 74% chose an average salary with good benefits.
- o On average, it took employees 32 minutes to arrive to their jobs.
- Only 26% of employees have signed contracts with their employers, and 20% had
   job benefits for themselves and their families.

 On a scale from 1-10, 1 representing least satisfied and 10 representing most satisfied, the average satisfaction rate for respondents who were currently working was 6.18.

#### 2.5 Training session

At the end of the street-level survey, respondents were invited to a training session that took place in the same governorate in which the survey was administered. This training provided information on governmental and non-governmental services as well as online platforms that help youth find decent jobs and suitable training programs.

We aimed to measure the attendance rates of training sessions and whether the information given at the recruitment interaction influenced attendance. We randomized the existence of an incentive across the sample. We also randomized whether or not individuals are invited to a gender-specific class, the purpose of which was to test if women were more likely to attend female-only information sessions. We followed-up the survey with a phone call to confirm the training session and provided details about the timing and location.

In addition to testing the effect of information on attendance, we also wanted to see if training sessions would be a successful method in recruiting people for job fairs when transitioning to the full implementation of the research design.

We invited a sample of our survey respondents to the morning and evening sessions and randomized the information given in the invitation as follows:

- 1. A group is informed about the training session
- 2. A group is informed that a monetary transportation subsidy will be provided
- 3. A group is informed that the information session will be held for males and females separately
- 4. A group is informed on both point 2 and 3 (monetary incentive + gender-specific class). We tested the training sessions in Cairo, Alexandria, and Fayoum.

Initially we had two days of morning training sessions for Cairo where we invited 123 participants, 56 of whom confirmed attendance. The training session was located in an NGO in downtown Cairo near the metro station and close to other public transportation routes. When no one showed up to the training, we called those who had confirmed to see if location, timing, or any other factor

prevented them from coming. We invited them along with 30 other survey respondents to an evening session on another day. We made sure to clarify the address and added directions on how to get to the training session using the metro line. 26% of those who confirmed attendance showed up. Although this remained to be a low attendance rate, it was an improvement compared to the morning sessions.

In Alexandria, we organized four sessions on the same day: two in the morning and two in the afternoon. 20% of those who confirmed attendance showed up, the majority of whom attended the morning session.

Since we expect that NGOs would be more successful in recruiting people due to their local connections, beneficiaries, and the trust that people would feel with those they already know, we tested this strategy in Fayoum.

In Fayoum, we reached our survey target sample through a local NGO and the street, allowing us to directly compare the recruitment methodologies to each other. 100 individuals were recruited by the NGO "Rooh Al Hayah" to attend the information session and then respond to the survey after the session. 150 individuals responded to the survey from the street-level and were invited to the information session by the enumerators. A much smaller proportion of those invited through street-level recruitment actually showed up to the orientation session, providing some evidence that the NGO-level recruitment was more effective. The NGO "Rooh Al Hayah" reached our target sample, unemployed youth jobseekers, through three channels: 1. Friends of NGO employees, 2. university students, and 3. female village leaders, "Ra'edat Reefeyyat" The understanding with the NGO was that for each individual that showed up to the information session, we paid 20 EGP to the NGO and 30 EGP to the participant directly.

These experiences taught us that attempting a two-stage research design, where we would invite people to an information session before inviting them to the job fair, would be too difficult to pull off. Getting individuals to go to an information session by itself was a difficult task, even after providing them with monetary incentives for attendance. This mimicked the challenge of getting them to go to the job fair in general, and so we thought it might be best to consider inviting people directly to job fairs, instead of adding this intermediate step.

# 3. Experiments with the National Employment Pact (NEP)

NEP holds regular job preparation orientation sessions at their office of which attendees are referred to during the matching process or when they visit the office to apply for their services. 15-20 people show up on average each session.

They also hold mini fairs at their offices, which are small-scaled job fairs with a small number of companies and attendees.

To pilot out intervention in the form of orientation sessions with information before the job fairs, we wanted to test if doing a street campaign and a Facebook ad to publicize NEP's orientation sessions would increase attendance. Similarly, we also tested whether online and digital advertising methods for mini fairs through Facebook, Google, and mass SMS ads were effective in recruiting jobseekers.

#### 3.1 Orientation session

We wanted to test if doing a street campaign and a Facebook ad to publicize these sessions would affect attendance.

#### 3.1.1 Street recruitment

NEP promotes their employment events through a street recruitment campaign. They target areas with dense youth populations who would be a good fit for blue-collar jobs. NEP volunteers get training on street recruitment from an NEP employee and start the street recruitment and flyer distribution around one week before the event. They are well trained to target youth who fulfill their criteria of having completed military service and not being currently employed with a formal contract.

We wanted to test the effect of applying the same recruitment strategy to recruit for the orientation sessions. We covered the cost of a four-day street recruitment campaign consisting of the stipend of 20 volunteers and the cost of printing flyers. The campaign took place from April 14<sup>th</sup> to April 17<sup>th</sup>, 2018, from 3:00 PM to 10:00 PM and targeted Ard el Lewa, Nahia, Ramsis and el Behous areas in Giza governorate. Volunteers collected the contact information of 366 interested jobseekers and received 177 confirmations upon calling them to confirm the timing and place of the session. However, despite the increased efforts and large number of confirmations, attendance

rates were modest. Orientation sessions took place on the 18<sup>th</sup> and the 19<sup>th</sup> of April 2018. 14 people showed up to the first session and 16 showed up to the second session. These rates are similar to NEP's past attendance rates, so it seems that the street recruitment campaign did not have the desired effect on attendance.

Table 1: Session Attendance after street recruitment

Date	Approached	Confirmed	Atı	tended		
				14		
April 18			Males	Females		
	266	155	10	4		
	366	177	(71%)	(29%)		
					16	
April 19			Males	Females		
7 pm 19			11	5		
			(69%)	(31%)		
				30		
	Total		Males	Females		
			21	9		
			(70%)	(30%)		

#### 3.1.2 Facebook advertisements

NEP has an online presence through their website, Facebook, and YouTube. Since the penetration rate of Facebook is very high amongst youth in Egypt (37 million Egyptians access Facebook every month – according to Facebook Q3 2017 report), we decided to try to recruit youth to the job preparation orientation session through a paid advertisement on Facebook. We ran a split test consisting of three versions of the same ad:

Version 1: Basic ad for the job preparation program with a briefing of its contents and instructions on how to register;

Version 2: Basic ad + Special emphasis on NEP job fairs; and

Version 3: Basic ad + Special emphasis on NEP job matching achievements.

The ad ran for 10 days twice, once in May and once in August 2018. In both times, Version 2 of the ad with the information on job fairs had the highest Facebook engagement.

In the May ad, 152 people left their contact information through a comment on the ad or through sending NEP's Facebook page a message to register for the job preparation orientation session. NEP called them to confirm the time and venue of the session and got confirmations from 52 people. The sessions were tailored to be one-day sessions and ran on May 24<sup>th</sup> and May 28<sup>th</sup>, where 5 and 8 people attended, respectively.

In August, three sessions were held. A two-day session on August 1<sup>st</sup> and 2<sup>nd</sup>, and two one-day sessions on August 9<sup>th</sup> and 14<sup>th</sup>. In the three sessions, larger numbers of interested jobseekers and confirmed attendees did not mean higher attendance. Just like the sessions in May, attendance was modest (6, 7, and 1 for the three sessions, respectively).

It seems that no matter what method we use or what numbers we reach out to, jobseekers are not very keen on attending the job preparation orientation sessions.

Table 2: Session attendance after Facebook Ad

Date	Signed Up	Confirmed	Attended
May 24	152	52	5 Males Females 4 1 (80%) (20%)
May 28	Males Females 131 21 (86%) (14%)	Males Females 48 4 (92%) (8%)	8 Males Females 7 1 (87%) (13%)

				6								
August 1-2	16	8	Males	Females								
August 1-2	10	O	3	3								
			(50%)	(50%)								
				7								
August 8-9	70	15	Males	Females								
riugust o y	70	13	2	5								
												(29%)
August 14	4 20 6		August 14 20 6 1 Female		emale							
August 14	20	O	(10	0%)								
			2	27								
	Total		Males	Females								
	1 Otti		16	11								
			(59%)	(41%)								

#### 3.2 Mini fairs

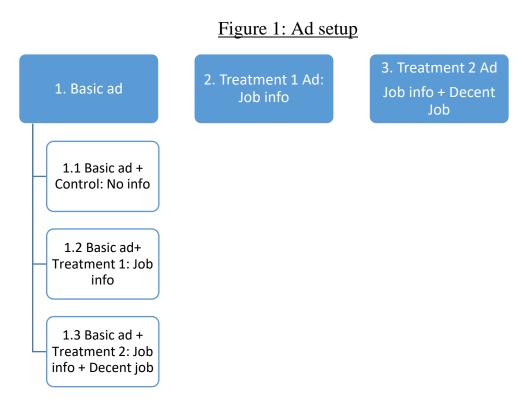
NEP holds regular mini-fairs, which are small-scale job fairs held at NEP's office on a monthly or bimonthly basis. They also have an online presence on Facebook, YouTube, and a website. We have been trying to help them increase attendance using online ads that are randomized and tailored to our experiment. This is different from our previous online recruitment efforts that focused on recruiting for information sessions. We believe that eliminating this intermediary step of attending an information session before being invited to a job fair encourages more people to respond and attend NEP's job fairs as opposed to the low attendance for orientation sessions.

We ran five versions of the ad:

Ad 1.1: Basic ad with information on fair date, location, and NEP's contact numbers;

**Ad 1.2**: Basic ad is displayed (Ad 1.1), then **after** clicking on the ad, signing-up information on the number of **jobs** available, number of participating companies as well as some job titles are displayed;

- **Ad 1.3**: Basic ad is displayed (Ad 1.1), then **after** clicking on the ad, signing-up information in ad 1.2 is displayed in addition to information on **decent jobs**. This includes assurance that the jobs provided by NEP are decent and provide a minimum salary, social and medical insurance, and that the workplace is safe;
- **Ad 2**: Information on the number of **jobs** available, number of participating companies as well as some job titles are displayed in the ad itself **before** signing up; and
- Ad 3: Information in ad 2 as well as information on **decent jobs** are displayed in the ad itself **before** signing up.



Since ads 1.1, 1.2, and 1.3 display the same information before sign-up, we expected to get the same selection of people and be able to attribute any differences we see to the impact of the information treatments. We expected to see no significant differences in the number of clicks and sign-ups, but potential differences in attendance rates and job market behavior between the different treatment arms. On the other hand, ads 2 and 3 showed different information before signing-up, so we expected to see a different selection of people who would be clicking and registering on the ads. This design allows us to both estimate the impact of the information on behavior as well as on the selection of people in job fairs.

We ran the ad in October and December 2018 and February 2019. We used Facebook and Google to test the different ad versions. We have tried SMS ads in December and found that it was not an effective method for recruiting blue collared jobseekers to a job fair.

Below is a detailed analysis of the results of the campaigns we held.

#### 3.2.1 Facebook ads

We used Facebook to advertise for NEP's October mini-fair. The ad ran for 6 days, from October 12<sup>th</sup> until October 17<sup>th</sup>, 2018, and was targeted at males in greater Cairo aged 18-35.

504 people signed up to the ad. Upon calling them to confirm their attendance, 43% confirmed, and 8.5% actually showed up. Those who came through the ad made up 40% of total attendance.

Table 3: October Facebook ad attendance

Date	Signed-up	Confirmed	Attended
October 17 2018	504	214	43
October 17 2018	304	(42%)	(8.5%)

Furthermore, as we expected, Table 4 shows that ad version 3, with the most information displayed pre sign-up, achieved the highest registrations rates (23%).

Table 4: October Registrations by ad version

Ad version	No.	%
1.1:Basic	110	21.83
1.2:Basic+Info on jobs after sign-up	92	18.25
1.3:Basic + Info on jobs + Decent job after sign-up	99	19.64
2:Info on jobs before sign-up	87	17.26
3:Info on jobs + Decent jobs before sign-up	116	23.02
Total	504	100

Out of those who showed up, 39% were nominated to jobs (either jobs at the fair itself or matched to jobs registered at NEP's database). 25% satisfied NEP's employment criteria (suitable age, clear military service, no criminal record, have Egyptian citizenship, etc.) but were not matched during

the event. Their information would be stored at NEP's database for future matching opportunities. 16% were matched but were found to not have been placed after follow-up, either due to rejection by the employer or rejection of offer by the jobseeker. The remainder did not fulfill NEP's employment criteria and hence were not matched.

Table 5: Status after October fair

Status after October fair	No.	%
Unfit	9	20.5
Matched/Nominated	17	38.6
Fit but not matched	11	25
Matched/nominated but not placed	7	15.9
Total no.	44	100

## 3.2.2 Google ads

For the December 2018 mini-fair We used Google to target males and females aged 18-35 in Greater Cairo, looking for jobs in the blue collar sector. The ad ran for four days (December 23-26, 2018) and was displayed using two methods:

- 1. Search engine: where people who used Google search with key words related to job search and blue collars were shown the NEP ad at the top search results
- 2. Ads on websites: The ad appeared on websites that our target group often visit such as YouTube, certain blogs, and other websites.

When jobseekers clicked on the ad, they were redirected to different randomized webpages of a website created for our experiment. There were five versions of the page to represent the five ad versions as we have done on Facebook. There are slight differences in ads 1.2 and 1.3: where on Google jobseekers see the extra information after they click on the basic ad and get redirected to the relevant webpage, before registration, on Facebook the information is displayed after registration. For ads 2 and 3, having a webpage gave us the flexibility to share more information than on Facebook, enabling us to share detailed flyers with jobs titles, salaries, benefits, qualifications, etc. for the relevant treatment groups. A google form was embedded within the different webpages for jobseekers to register, and confirmation calls were made to confirm attendance.

Overall, we found that Google had better targeting than Facebook. Although the number of registrations were lower than that of Facebook, it seems that those who registered from Google ads were more serious as the show-up rates were higher. 13% of those who registered through Google showed up at the event, which is higher than the figure for Facebook (8.5%).

Table 6: December Google ad attendance

Date	Signed-up		Confirmed		Attended	
	Males Females 235 45		15	56	3	8
			(55.	7%)	(13.	6%)
December 27 2018			Males	Females	Males	Females
			132	24	30	8
	(84%)	(16.1%)	(85%)	(15%)	(79%)	(21%)

Similar to the registration results of the Facebook ad in October, Table 7 shows that Google registrations were higher for ads that provided more information. Ads 2 and 3 received 30% and 28.6% of total registrations, respectively, while ads 1.1, 1.2, and 1.3 received 21%, 10%, and 10% of registrations, respectively.

Table 7: December Registrations by ad version

Ad version	Males	Females	Total
1.1:Basic	22.13%	14.30%	21.07%
1.2:Basic+Info on jobs after clicking	8.50%	16.30%	10%
1.3:Basic + Info on jobs + Decent job after clicking	11.06%	6.10%	10.36%
2:Info on jobs before clicking	28.09%	36.70%	30%
3:Info on jobs + Decent jobs before clicking	30.21%	18.40%	28.57%
Total	235	45	280

Table 8 shows the outcomes for jobseekers after the job fair. Around 50% of total attendees were nominated to jobs either in the fair itself or jobs available on the NEP database, and 14.6% were not matched to an NEP job at the time of the mini fair.

Table 8: Status after December fair

Status after fair	Males	Females	Total
Unfit	37.50%	33.30%	36.60%
Matched/Nominated	46.90%	55.60%	48.80%
Fit but not matched	15.60%	11.10%	14.60%
Total no.	32	9	41

#### 3.2.3 SMS ads

3000 SMS's were sent advertising for the NEP mini-fair in December 2018, targeting areas close to NEP and close to the jobs available. Three SMS versions were sent (1000 each); all had the same basic text message with the date and time of the fair and NEP contact and address with different registration links. Depending on what link they received, clickers would be redirected to either:

- webpage 1 with the basic information and registration form;
- webpage 2 with information and flyers on job details and the number companies attending, or finally; or
- webpage 3 with the same information as that on webpage 2 as well as information on decent jobs.

However, despite our hopes for SMS ads, registrations were extremely low. It could be that people interested in blue collar jobs do not have smart phones, or that they would not use their internet package to open a link they do not know. It could also be a problem of targeting, as it is hard to target blue collar jobseekers only. Regardless of the reason behind the low take-up, we have decided not to pursue this method for future fairs.

Due to the low attendance compared to outreach attempts, we have decided to alter our research design to door-to-door recruitment to job fairs.

# 4. Implementation of First set of RCTs

## 4.1 Research Design

We used a door-to-door recruitment design where trained data collectors knocked on apartments (or individual homes) and asked if the unit had any jobseekers aged 18-35 living in this

apartment/building and looking for work. If the unit had jobseekers fulfilling the criteria, data collectors would start the survey with them and give them the intervention according to the randomization instructions that would appear on their tablet.

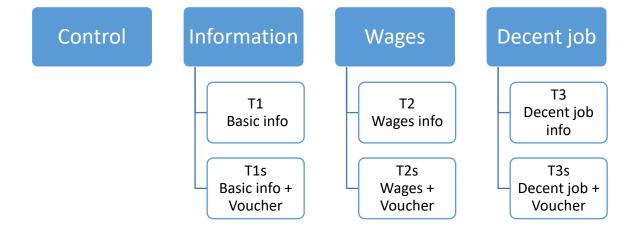
Randomization was done at the building level as we expected that neighbors in the same building might tell each other what information they had received. By giving the same information to the whole building, we reduced the possibility of information spillover that would have made us underestimate the impacts of the interventions. Buildings were randomized into seven groups:

Treatment 1: jobseeker is given a basic flyer with the date and address of the job fair; Treatment 1s: same treatment as T1 but also offered a voucher redeemable at the fair; Treatment 2: T1+ info on job fields, a salary scale, and the matching rate in previous fairs; Treatment 2s: same treatment as T2 but also offered a voucher redeemable at the fair; Treatment 3: T2+ info on decent jobs: minimum salary, formal contracts, social insurance, paid vacations, abidance by the Egyptian labor law, and providing a working environment where employees are respected;

Treatment 3s: same treatment as T3 but also offered a voucher redeemable at the job fair; and

Control: Baseline survey was conducted with no information or transportation subsidy provided.

Figure 2: Research Design



#### 4.2 Job fairs

We have participated in three job fairs, two with Shghalni.com in April and November 2019 and one fair organized by JobMaster in December 2019.

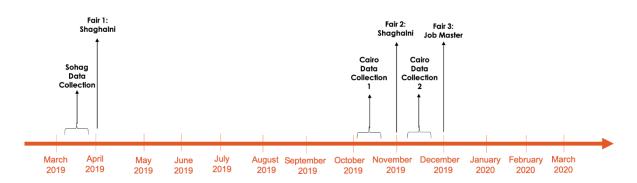


Figure 3: Job fairs timeline

# 4.2.1 Sohag: Shaghalni

#### Data collection

Sohag was divided into several districts, and the data collection team picked the districts most suitable to the recruitment sample (high density, low income areas) so as to find candidates suited to blue-collared jobs. Districts were divided into blocks, which are sets of buildings connected together on the map. Data collectors were then divided by areas, where each covered a block of a certain district. They knocked on apartments and asked if the unit had any jobseekers aged 18-35 looking for a job.. If the unit had jobseekers of that age range, they took their information (name, address, contact information, and time availability) and informed them (or the person who gave them the information) that they will be visiting them the following week. This created trust between data collectors and the jobseekers and made the process of going back for baseline and treatment smoother. Following the census, data collectors revisited the jobseekers to conduct the survey and implement the intervention. Around 2,400 jobseekers were reached with 34% females.

#### Fair

The job fair took place on April 8<sup>th</sup>, 2019 in Sohag governorate. The J-PAL team was responsible for taking registrations at the entrance. Around 600 jobseekers attended this fair. Upon matching the sign-up sheets with our sample, we found that 50% of attendees came through our recruitment. From our sample, 14% showed up.

4.2.2 Cairo: Shaghalni

Data collection

Data collection took place for 14 days before the fair. Different areas in Cairo were targeted based

on the location of vacancies at the fair. Around 3,500 jobseekers in 1,800 buildings were surveyed,

with females making up 35% of the sample.

Fair

An estimate of about 6,000 individuals attended. J-PAL was responsible for registering all

attendees so as to match the attendance data with our door-to-door survey data and measure

attendance through the experiment. 7% of our sample attended the fair, showing a sharp decrease

from the 14% figure in Sohag. The results section will discuss in more detail the different

characteristics of the Sohag and Cairo sample and how these differences affect attendance rates

and job search behavior.

4.2.3 Cairo: JobMaster

Data collection

Similar to the Shaghalni Cairo fair, data collection took place for 14 days before the fair. Different

areas in Cairo were targeted based on the location of vacancies at the fair. Around 1,800 jobseekers

were surveyed, with females making up 42% of the sample.

Fair

The fair was exclusively organized for the J-PAL experiment, so JobMaster was only responsible

for the logistical details and did not do any advertising efforts. All recruitment was done by J-PAL.

The venue was secured by MSMEDA. Total attendance was 210 jobseekers who either knew about

the fair through direct recruitment by the data collectors or were told about the fair by other

jobseekers recruited to the experiment. J-PAL was responsible for registering attendance and

matching with the recruited sample. 6.5% of the sample attended the fair. This figure, along with

the figure from the previous fair in Cairo, shows that attendance was generally lower for Cairo

than for Sohag. The results section discusses these differences in more detail.

# 5. Results

# 5.1 Summary statistics

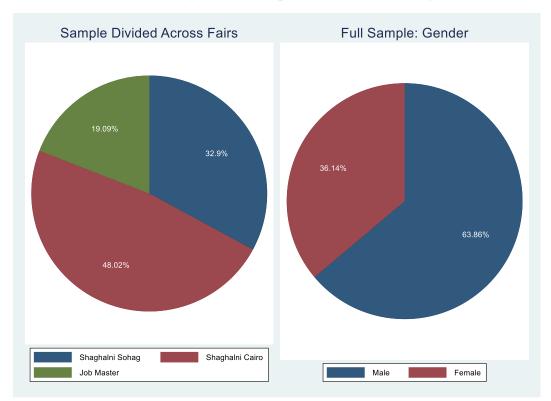


Figure 4: Sample across fairs and gender

The baseline sample included a total of 7,256 jobseekers. Fair 1 took place in Sohag in collaboration with Shaghalni, where 2,387 (33%) baseline surveys were collected. The data collection for Fair 2, which was also in collaboration with Shaghalni but in Cairo, had the greatest share of baseline surveys conducted, with 3,484 individuals (48%). The fair with JobMaster included 1,385 people (19%). Hence, 4,869 (67%) of the baseline surveys were done in Cairo.

The gender distribution, as seen in figure 4, was more skewed towards men than women. 64% of the participants were men, which amounts to 4,634 individuals, while females made up 36% of the total sample, which translates to 2,622 individuals. 60.58% of participants were aged 27 or younger. The average age of the sample was 26.43 years old. 34% of the sample have a technical vocational high school diploma and 18.6% have a university degree or above. Even though the data collection design did not necessarily allow targeting individuals whose educational levels

suited the jobs offered in the job fairs (blue collared jobs), these general figures indicate that the educational levels of participating individuals were in line with the jobs offered in the fair.

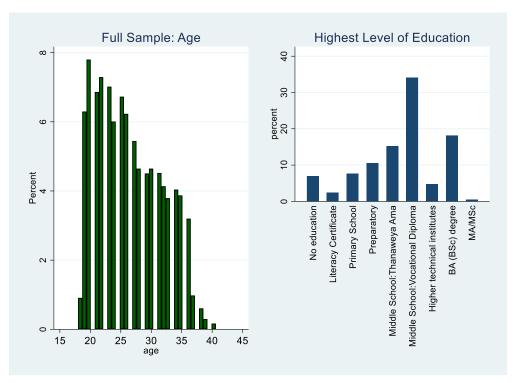


Figure 5: Age and education distribution

45% (3,242 individuals) of the full sample declared that they were working at the time the baseline survey was conducted. All of these employed individuals had stated that they were either actively seeking alternative choices for employment or would take another job if it was offered to them within the next 2-6 months.

Full Sample: Employment

44.68%

55.32%

Figure 6: Employment

# 5.2 Impacts of Treatments on Attendance

By combining our data on attendance with our baseline data and treatment assignment, we were able to estimate the causal impact of the different types of information and the voucher on job fair attendance. Table 9 below reports the results.

Column 1 shows that, across the whole sample, only 3.5% of individuals in the control group attended the fair. When we compare that to those in treatment 1, who are given only basic information about the existence of the fair, we find an increase of 4.7 percentage points in attendance, a 134% increase. Columns 2 and 3 split the sample by gender. We see that the attendance of women in the control group was lower than that of men, with only 2.4% of women attending relative to 4.1% of men. At the same time, the impact of basic information on women was greater with a 5.1 percentage point increase (a 212% increase relative to control), as opposed to a 4.4 percentage point increase for men (a 107% increase relative to control). This showcases that basic information frictions are an important part of the reason why job fairs are not as well attended as the organizers would like.

Table 9: Impact of Treatments on Attendance

	All	Females	Males
	(1)	(2)	(3)
Panel A: Direct Effects			
Basic Info	0.047***	0.051***	0.044***
	(0.011)	(0.016)	(0.013)
Wages Info	0.053***	0.053***	0.053***
	(0.011)	(0.016)	(0.013)
Decent Job Info	0.032***	0.044***	0.026**
	(0.010)	(0.016)	(0.012)
Voucher	0.051***	0.049***	0.053***
	(0.010)	(0.015)	(0.011)
Mean	0.035	0.024	0.041
Joint	0.000	0.000	0.000
Same	0.193	0.854	0.129
N	7256.000	2622.000	4634.000
Panel B: Marginal Effects			
Any Awareness Info	0.047***	0.051***	0.044***
	(0.011)	(0.016)	(0.013)
Additional Wages Info	0.006	0.002	0.009
	(0.013)	(0.019)	(0.015)
Additional Decent Job Info	-0.021*	-0.010	-0.027*
	(0.012)	(0.018)	(0.014)
Voucher	0.051***	0.049***	0.053***
	(0.010)	(0.015)	(0.011)
Mean	0.035	0.024	0.041
N	7256.000	2622.000	4634.000

Notes: Joint is the p-value for the test for joint significance. Same is the p-value for testing for no differences between treatments. Robust standard errors in parentheses. Cohort fixed effects are used. Significance \* .10; \*\* .05; \*\*\* .01.

In the next row, we estimate the impact of providing people with information about the wages of the jobs that are available at the job fair. We find a similar increase in attendance for individuals in the "info+wages" group, although slightly larger. In Panel B, we estimate the marginal difference of the wages treatment relative to the "basic info" group and find that providing

information on wages only increases attendance by 0.6 percentage points on average, and that this difference is not statistically significant.

We then consider the third information treatment, which additionally provided people with information about how the jobs available at the fair were "decent jobs". To our surprise, we find that this additional information, although intended to be a positive addition, actually led to a decrease in attendance, on average. When split by gender, we find that the negative impact was concentrated among men.

Finally, we consider the impact of providing people a travel voucher for fair attendance. We find a strong positive impact in using the travel voucher, with a 5.1 percentage point increase on average, which is relatively similar across both men and women. This estimated impact is very similar in magnitude to the impact of the basic information treatment.

This implies that information frictions are as big a constraint as monetary constraints in job fair attendance. It is not that one type of friction is the main driver of low attendance, but that both types together have large impacts. Since the voucher treatment was cross-randomized with the information treatment, this means that those people who got both the information and the voucher increased their job fair attendance by 9.8 percentage points (a 280% increase relative to control), which is a 10.0 percentage point increase for women (416% increase relative to control) and a 9.7 percentage point increase for men (a 236% increase relative to control). Figures 7 & 8 show these results in a visual format.

Figure 7: Attendance

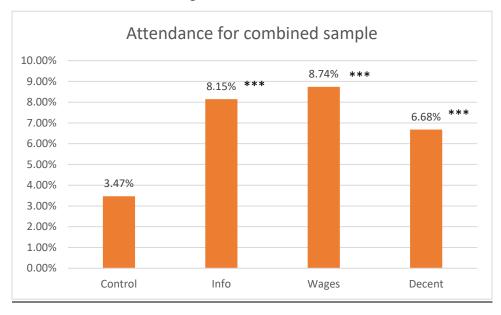


Figure 8: Attendance by fair

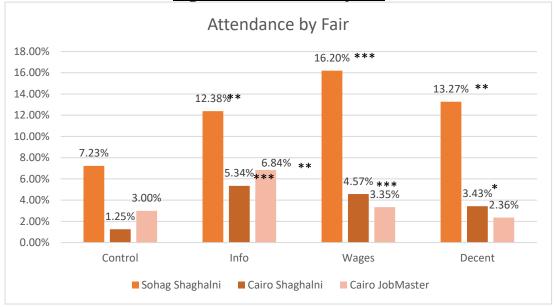


Figure 8 shows attendance across the three job fairs. We can instantly see that the Sohag job fair had the highest attendance across all treatment and control arms. We see that from the control, 7% showed up despite not being told about the fair by the surveyors. This shows a positive spill-over for the information treatment arm. We also see that just by telling people about the job fair's time and location, attendance increased by 70% (from 7% to 12%). Furthermore, the second information treatment on wages increased attendance to be 16%. These results tell us that, in

Sohag, information frictions do exist and that just by bridging these gaps, we were able to increase attendance. On the other hand, we see that, on average, transportation vouchers increased attendance by 3 percentage points (from 7% in control to 10% in the voucher sample) across the treatments. This is less than just telling people about the fair. Furthermore, the result is insignificant, which shows that, although cash constraints exist, they were not as huge or significant as information frictions for the Sohag sample.

On the other hand, the trends for the Cairo fairs organized by Shaghalni and JobMaster were different. It is obvious that attendance was lower across all treatment arms; however, providing a voucher complimented the information by increasing attendance an additional 8% and 9% on average for the Shaghalni and JobMaster Cairo fairs, respectively.

## 5.3 Importance of Baseline Beliefs and Expectations on Treatment Effects

We collected baseline data on beliefs and expectations about job fairs and the labor market so that we could try to understand the reasons behind the impacts we would find. Table 10 below splits the sample up into 3 groups: individuals whose expectations about the salaries provided by the jobs at the job fair were below the actual salaries, those whose expectations were in line with the actual salaries, and those whose expectations were above the actual salaries. We use the individuals whose expectations were in line with reality as the reference group.

Table 10 restricts the sample to those in the "info only" and "info + wage" groups. We look to see if the type of baseline beliefs they held affected the impact of the treatment. We use the individuals who had the correct baseline expectations of salaries at the job fair as the reference group and compare them to the individuals who had expectations that were either too high or too low.

We find that those who had accurate expectations to begin with did not differ in their attendance rates relative to those who got information only. On the other hand, those who had lower expectations than reality were more likely to go to the job fair when compared to the same people that only got basic information on the fair. This implies that information does not have a uniform impact on jobseekers but interacts with their existing beliefs. We find no significant differences for individuals whose expectations were higher than reality, although the point estimates are in the opposite direction than we had anticipated.

Table 10: Effect of Salary Expectation on Attendance

	All	Female	Male
	(1)	(2)	(3)
Marginal Effects			
Additional Wages Info	-0.017	-0.019	-0.017
	(0.012)	(0.020)	(0.014)
Voucher	0.054***	0.050***	$0.057^{***}$
	(0.010)	(0.015)	(0.012)
Additional Wages Info*JF salary below	$0.054^{**}$	0.047	$0.065^{**}$
	(0.022)	(0.033)	(0.032)
Additional Wages Info*JF salary above	0.041	0.043	0.042
	(0.035)	(0.042)	(0.040)
Mean	0.035	0.024	0.041
N	5341.000	1963.000	3378.000

Notes: The dependent variable is fair attendance. Regressions are conditional on being given Any Awareness Info. All regressions control for interaction characteristics. Fair fixed effects used. JF salary below/above indicates that beliefs regarding salary in the job fair falls below/above the salary range offered at the fair. Robust standard errors in parentheses. Significance \* .10; \*\* .05; \*\*\* .01.

## 5.4 Beliefs and expectations by governorate

The following figures compare employment expectations and the perception of job fairs and the labor market across governorates.

As per figure 9 below, the difference in the job types between Sohag and Cairo for those currently working is noticeable, whereby participants from Cairo were more concentrated in skilled white collar and skilled blue collar workers (32% and 39% of participants from Cairo, respectively). However, the majority of participants (37%) from Sohag had unskilled blue collar jobs, directly followed by 34% of participants with skilled blue collar jobs. This observation could explain the attendance disparity in terms of how suited participants were for the jobs that were offered in the fair where it could be that unskilled labor are more likely to attend a job fair, thinking that it would provide them with better matching opportunities than skilled or white collar labor.

Job type Sohaq Cairo 40 40 30 30 percent 20 percent 20 9 9 Blue Collar: Unskilled Blue Collar: Unskilled Blue Collar: Skilled White Collar: Skilled Blue Collar: Skilled White Collar: Skilled

Figure 9: Current job type by fair

Figure 10 below shows that, in Sohag, people are ready to accept a much lower wage for a job than in the Cairo sample. More than 40% of the Sohag sample stated that their reservation wage was 1,500 EGP or less, while for Cairo the figure was only 7%. In Cairo, more than 60% stated that their reservation wage was above 2,000 and below 4,000 EGP, while only 26% of the Sohag sample had this reservation wage.

Furthermore, when asked about the expected salary in the market, 60% of the Sohag sample valued their market price to be 2,000 EGP or less, while more than 60% of the Cairo sample valued their market price to be above 2,000 and below 4,000 EGP. So, it seems that the Sohag sample had a lower reservation wage and market price for themselves. It could be that these low initial expectations resulted in a better response to our treatments when we gave them information on the wages offered at the fair.

Reservation Wage **Expected Salary** Categorized Sohag Cairo Sohag Cairo 9 9 9 40 40 30 4 40 percent percent percent 20 percent 20 20 20 10 <=1500 >4000 <=2000 >4000 <=2000 >2000 and <=4000 >1500 and <=2000 >2000 and <=4000 >2000 and <=4000 >2000 and <=4000 >4000 >1500 and <=2000 <=1500

Figure 10: Reservation wage and expected salary by Gov

Building on this, we measured perceptions regarding the labor market employment opportunities by asking respondents to measure how hard it is to find a job, on a scale from 1 to 10, as well as the number of expected months until a jobseeker lands a job. While participants from both governorates believed that finding jobs was very hard (choosing 10 on the hardness scale where 1 means very easy and 10 means very hard), the figures in Sohag are more skewed to the right with 50.6% having chosen the highest value on the scale versus just 28% in Cairo, as shown in figure 11. Overall, 40.45% of Cairo residents gave a value of 5 or lower in terms of hardness, as opposed to 18.56% of Sohag residents. Furthermore, 28% of the Sohag sample believed that they would get a suitable job in more than 2 years versus only 8.5% in Cairo. The pessimism in Sohag could be a factor that explains the attendance disparity, as individuals from Sohag tended to have a bleaker expectation in terms of the ease of finding employment and, in turn, were more driven to participate in the fair.

Figure 11: Labor market perceptions by Gov

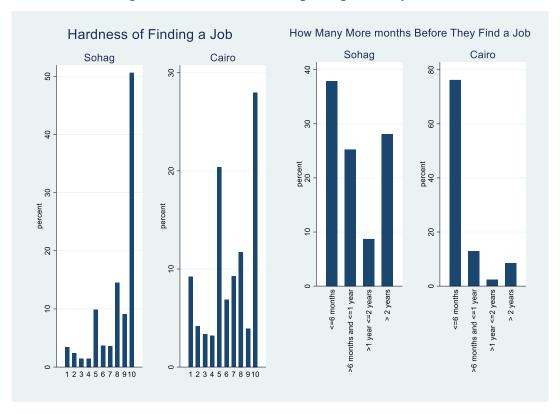


Figure 12: Job fair perceptions by Gov - Opportunities and wages



Finally, we also see respondents' perceptions and expectations regarding job fairs. Figure 12 shows that the Sohag sample had a more pessimistic expectation of opportunities at the job fair, where 58% of them believed there was a less than 50% chance of getting a job offer at the fair versus 54% of participants in Cairo. Furthermore, 50% of the Sohag sample believed salaries at the job fair to be 1,500 EGP or less, while only 11.5% of the Cairo sample believed so. Only 17% of the Sohag sample believed that salaries offered at the fair would be between 2,000-4,000 EGP versus 56% of the Cairo sample.

Figure 13 displays a categorization of the responses participants from Cairo and Sohag provided when asked about their expectations of the percentage of decent jobs at the fair (where decent means that the job provides a formal contract, social and medical insurance, paid vacations, and abides by the Egyptian labor law). As per the previous figures, the pessimism in Sohag is again observable in this figure. As shown, 66% of participants from Sohag believed the percentage of decent jobs to be 50% or lower, while participants from Cairo were almost equitably divided.

It is obvious that the Sohag sample initially had lower expectations about the job fairs. It could be that our information intervention was in line with these expectations, while in Cairo, they had high expectations to start with, so the information we gave them was not incentivizing enough. It could also be that the information given to Sohag was much better than their initial expectation that they showed up, while in Cairo, it was as per their expectations or below, so attendance was lower.

In the end, we are unable to completely determine why there were such big differences between the attendance rates across fairs, given our research design. To do so would require randomizing aspects at the job fair level, which would require a large sample of job fairs. Nonetheless, we are able to speculate about potential explanations. In addition to the differences in beliefs and expectations, we think another important reason for the difference is that the nature of Cairo as a megacity leads to lower levels of engagement in any one activity because there are so many competing demands on time relative to a less busy location like Sohag. Across much of our work in Egypt, we find higher rates of engagement outside major cities relative to inside them.

Chance of Finding a Decent Job in a Jobfair Categorized Sohag Cairo 80 50 40 9 percent 30 20 20 10 >50 <=50 <=50 >50

Figure 13: Job fair perceptions by Gov - Decent job

#### 5.5 Gender Dimension

Female labor participation in Egypt has always been low throughout the years. The highest it had reached was 23.5% in 2014, currently being at 22%.<sup>5</sup> Furthermore, the wage gap between men and women remains high, where it is estimated that the income of an average man is about 3.8 times that of an average woman.<sup>6</sup> Such indicators shed light on the barriers women face in the

labor market, manifested in cultural barriers affecting women's mobility, bad and unsafe job conditions that put women at different risks, and unpaid domestic work and home responsibilities that prevent women from working for long hours or adding constraints to the location of their job. Furthermore, it is common for employers to discriminate against women in hiring and pay, causing females to be further discouraged from entering the labor market and increasing female unemployment rates.

<sup>&</sup>lt;sup>5</sup> International Labour Organization, ILOSTAT database. <u>Link</u>.

<sup>&</sup>lt;sup>6</sup> Global Gender Gap Report. (2020). The World Economic Forum. Link.

In our experiment, we see evidence that the effect of basic information is stronger for women relative to men and that the attendance of women who knew about the job fair was higher than that of men. It might be because women have lower employment opportunities and start off at a position that is more disadvantaged than their male counterparts, so any intervention has a stronger impact on them relative to that on males. Furthermore, the door-to-door recruitment strategy that this project adopted succeeded in gaining female jobseekers' trust, especially since cultural considerations regarding the presence of female surveyors were considered when addressing female jobseekers. In many cases, the presence of a male member in the household encouraged female jobseekers to participate in the survey, leading us to expect that it led to more trust from the household as a whole, relaxing cultural mobility constraints that could have prevented the attendance of females due to a lack of trust. Last but not least, we expect that the introduction of the transportation voucher not only acted as an incentive for jobseekers to attend, but also encouraged females—who might have had mobility constraints in the form of safety concerns—opt for more expensive and safer means of transportation covered through the transportation voucher.

In an attempt to further explore gender differences in labor market, we compare employment expectations and perception of job fairs and the labor market across males and females.

Table 11 shows the distribution of individuals whose expectations about the salaries available at the job fair were either correct, too high, or too low. We split this by gender and find that women were much more likely than men to have lower expectations about available wages at the job fair. This implies that women think that the jobs that are available are worse than they actually are, which may lead to them decreasing their job search efforts due to this information friction.

Panel A of figure 14 shows this data visually and provides additional information about reported reservation wages. According to economic theory, we expect that women would have higher reservation wages compared to men due to higher expenses. However, our results show that women had lower reservation wages, where 23% of women versus only 5% of men had reservation wages below the job fair wage range. This could be related to the fact that a history of discrimination and expectation of women to be secondary earners had dampened their wage expectations. Furthermore, while we see that women's reservation wages are low, their reservation working conditions could be playing a bigger role in impacting their labor market decisions, especially with the prevalence of informal jobs and the lack of protection, suitable transportation,

and safety in the workplace. In general, women are more risk-averse than men and might be willing to accept lower wages in return for jobs to be suitable. This is consistent with the fact that the negative impact of information on decent jobs discussed in section 5.2 was more prominent for men, as women care more about decent jobs. Men understand that there is a tradeoff between wages and decent jobs, while women already expect low wages and are more encouraged by the introduction of decent work conditions.

Finally, panel C of figure 14 shows a similar pattern where more women than men had market wage expectations below the ranges offered at the fair. Such patterns not only show that women are more pessimistic about their wage prospects in job fairs and in the labor market in general, but also that such perceptions could account for women undervaluing themselves, accepting wages below their real value and hence widening the gender wage gap.

Table 11: Difference in Beliefs about Salaries Available at Job Fair by Gender

	All (1)	Females (2)	Males (3)	Difference (4)
Job Fair Beliefs				
Below Range	.1671827	.257502	.1155895	1419125***
Within Range	.78682	.7250608	.8220987	.0970379***
Above Range	.0459973	.0174371	.0623118	.0448746***

Notes: Mean values are reported. Independent group t-test is performed. Difference = mean(male) - mean(female).

Above, within and below range refer to whether job fair salary expectations and below, within or above actual salary ranges in the job fairs. Significance \* .10; \*\* .05; \*\*\* .01.

Figure 14: Job fair perceptions by Gender - Wages

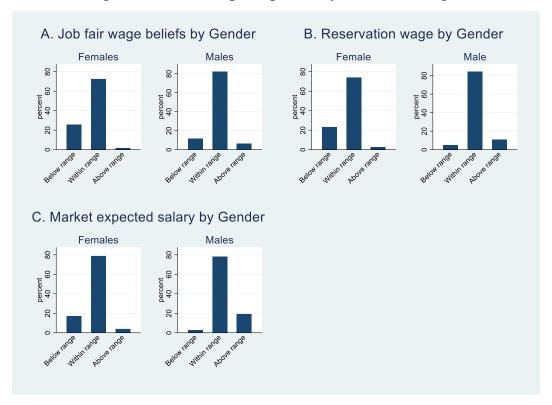
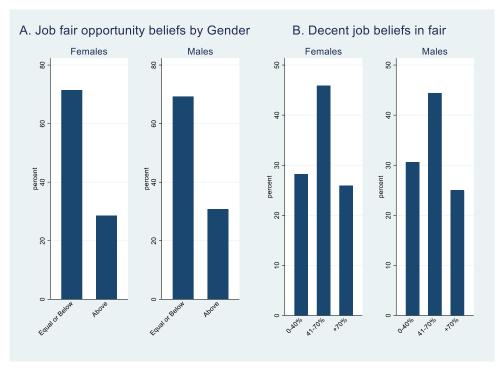


Figure 15: Job fair perceptions by Gender: Opportunities



On the other hand, we do not see high disparities between men and women in their perceptions of job opportunities in the job fair. Figure 15 shows that both men and women have very close perceptions about their chances of finding a job opportunity at the job fair, and also similar beliefs about the percentage of decent jobs at the fair. We define a decent job as one that provides minimum salary, formal contracts, social insurance, paid vacations, abides by the Egyptian labor law, and provides a working environment where employees are respected.

#### 5.6 Impacts from a Short-Term Follow-up Survey

We implemented a follow-up survey by phone within two weeks to a month from the fair date. The intent was to see how the fair changed people's actions and beliefs in the short term. In some cases, follow-up took longer due to hardships encountered in reaching jobseekers over the phone. For the first fair that took place in Sohag, a portion of the sample was interviewed face-to-face as many respondents had changed their numbers or were not responsive to phone surveys. We were able to reach slightly more than 4,000 individuals in our sample.

Table 12 reports the results of the analysis. We find positive but insignificant impacts on overall employment in the short-term. On the other hand, we see a decrease in the length of time people have been at their jobs, implying that people may have switched jobs during the month or so between the fair and the follow-up survey. This is strongest for those in the "decent job info" group. We see negligible impacts on income, job search, or reservation wages. On the other hand, we do find that individuals were more likely to apply for jobs and got slightly more job offers.

Table 12: Short Term Follow Up Results

	Control	Basic Info	Wages Info	Decent Job Info	Voucher
	(1)	(2)	(3)	(4)	(5)
Currently working	0.391	0.030	0.012	0.006	-0.009
	(0.017)	(0.026)	(0.026)	(0.026)	(0.018)
Been at job more than 6 months	0.688	-0.058	-0.041	-0.086**	0.013
	(0.026)	(0.037)	(0.038)	(0.039)	(0.027)
Income winsorise	2600.000	-50.400	-125.000	-128.000	96.172
	(77.742)	(120.000)	(111.000)	(117.000)	(86.144)
Job search yesno	0.882	-0.010	-0.008	-0.015	0.002
	(0.011)	(0.017)	(0.017)	(0.016)	(0.012)
Number of applications submitted	0.933	-0.024	0.030	-0.087	0.186**
	(0.072)	(0.113)	(0.113)	(0.108)	(0.085)
Number of interviews	0.441	-0.055	-0.060	-0.068	0.104***
	(0.040)	(0.054)	(0.058)	(0.055)	(0.040)
Number of job offers	0.419	0.012	0.077	0.027	0.000
	(0.047)	(0.075)	(0.069)	(0.078)	(0.054)
Expected monthly salary	2830.000	-2.952	-82.500	-29.200	77.678
	(51.113)	(76.451)	(76.456)	(75.031)	(54.980)
Reservation wage	2440.000	-82.000	-120.000*	-87.600	97.495**
	(39.320)	(62.761)	(61.899)	(61.136)	(47.274)
Months till find a job	4.675	0.457	-0.186	0.529	-0.654**
	(0.335)	(0.497)	(0.467)	(0.495)	(0.333)
Apply to jobs in fair (yes/no)	0.048	0.037**	0.063***	0.047***	0.039***
	(0.008)	(0.015)	(0.015)	(0.015)	(0.013)
No. applications	0.105	0.142***	0.133***	0.102**	0.100**
	(0.023)	(0.048)	(0.049)	(0.042)	(0.039)
No. offers	0.002	0.000	0.007	0.011**	0.011**
	(0.002)	(0.004)	(0.005)	(0.006)	(0.005)
Take offer (yes/no)	0.001	-0.002	0.002	0.003	0.003
	(0.001)	(0.002)	(0.003)	(0.002)	(0.002)

Notes: Significance \* .10; \*\* .05; \*\*\* .01.

The main challenge is that while the experimental treatment arms increased job fair attendance by a few percentage points, this increase in job fair attendance does not provide us enough statistical power to detect these effects. If we consider that, at best, the treatments increased attendance by 10 percentage points, we could do a "treatment on the treated analysis," which would lead us to multiply the estimates below by 10 to get the impacts on a person who was actually moved by the treatment. This would be the impact of attending the job fair. So, in that case, we would be able to claim that one out of every 5 people who went to the job fair actually got an offer (by adding the impacts of the voucher arm and the decent jobs arm), and that about 10% of those that attended

the fair are working now, but would not have been otherwise (by taking the average impact on "currently working" and dividing by the compliance rate).

#### 5.7 Long Term Follow-Up

We intended to implement a 12-month follow-up survey to assess what the impact of attending the job fair was in the long term. By the time we were ready to implement the survey on those who attended the first job fair, we were forced to change our plans due to the start of the COVID-19 pandemic. We initially thought that we could continue to implement the face-to-face surveys using precautionary measures, but it became clear that, with the complete upending of the labor market, any results we did find would be questionable since we would be looking at the impact of jobs fairs on a pandemic-impacted labor market. We decided to see if we could pivot to learning more about the frictions that affected labor market during COVID-19, which we describe in the next section below.

## 6. COVID-19 Response

#### 6.1 Qualitative Phone Interviews

In response to the COVID-19 pandemic, the research team conducted some qualitative phone interviews with jobseekers and matching organizations to see how different stakeholders were coping with the pandemic, what their needs were, how human resource firms were working in such conditions, and how J-PAL can provide an intervention that might help to mitigate the negative impacts of the pandemic. Interviews were conducted between the 18<sup>th</sup> and the 30<sup>th</sup> of June, 2020. Below are the main findings of the interviews conducted with jobseekers, employment intermediaries such as matching firms, and firm experts.

#### **Jobseekers**

A sample of jobseekers was randomly chosen from job fair attendees that also did the follow-up quantitative survey. A lot of those jobseekers mentioned that they had experienced some change in their work conditions since the COVID-19 outbreak. Most responses indicated a decrease in the number of working hours and a decrease in salary caused by a decrease in demand for products and services. This decrease in demand has also led to layoffs. Employers in industries such as restaurants, sports, weddings, and private tutoring have been strongly affected. Jobseekers mentioned that some companies started out by changing the working hours, then decreasing salary,

and were performing permanent or temporary layoffs at the time of the interviews. Most employees indicated that they were required to wear a mask at work. Some of the interviewed females were not affected by the pandemic as they were not working before COVID-19. Although the government is offering support as part of its COVID-19 policy response, the interviewed jobseekers did not receive any. Some jobseekers received support from family members.

When choosing between safety precautions and employment, all males prioritized employment over safety. Males were either working during COVID-19 or not working due to layoffs and unemployment before the virus. All males who were not working were searching for jobs during the time of the interview. Males who were not able to go to work in the preceding three months were not able to do so due to layoffs and curfew, but not due to safety concerns. Even if the concern was there, they still needed to go to work to survive. On the other hand, females interviewed were divided. While safety ranked higher for females than males, employment and income were still important especially amongst those with no/low financial support from their families. When choosing between safety precautions and salary, females preferred safety. Interviewed men were divided; salary needed to be above a certain level to prioritize it at the expense of safety. If salary was high enough, the employee could afford to take personal health precautions (such as buying costly masks). Later in the summer, when COVID-19 seemed to be contained, there were no clear views towards the preference of salary over safety or the opposite. It depended on the health situation in general.

When jobseekers were asked about the effect of the pandemic on job search behavior, many expressed that the types of jobs searched for did not change, especially for males. There was a stronger focus on online jobs, especially amongst females, such as online sales, managing online ads on social media, and selling cooked meals online. Females also expressed that it would be better for jobs to be close and not require traveling or moving around. Furthermore, all jobseekers preferred decreased exposure to crowded areas in the job search process and in the types of jobs sought. They were taking personal precautions regardless of the precautions/conditions at work. Some suggested that job search should be more focused on online tools such as Facebook and employment websites.

During the time of the interview, COVID-19 health precautions were strictly applied, and it was mandatory by law to wear masks for workers in shops. In more than two-thirds of the interviews, most were fearful of dealing with someone with no mask/precautions, and a few did not care at all.

When asked about their preferred mode of transportation during the pandemic, jobseekers expressed that walking or using a private car/motorcycle was a preferable option to public transportation and taxis. Public transportation was still widely used because it was the only affordable option. Jobseekers said that taxis were safe, but very costly for regular use. Females cared about jobs being near to them and about the availability of good transportation more than men.

According to jobseekers and job matching organizations, the most affected industries included cafes and restaurants, hospitality, events and weddings, advertising, airlines, cars, oil, real estate, and fashion and clothing. Industries that have benefitted/sustained themselves during the pandemic include delivery, supermarkets, telecommunications, call center jobs, e-commerce, and pharmaceuticals.

#### **Intermediaries**

Organizations that specialize in matching jobseekers with employers were challenged by the low number of vacancies in the market and low number of companies using their services. They said that they expect that it would take at least one year for the market to return back to normal. The National Employment Pact (NEP) adapted to the situation by making all of its matching services remote. They match online through their Facebook page, communicating with jobseekers through Facebook and phone calls, although the jobseekers' interviews with the companies remained faceto-face. All functions of NEP are operating remotely except for the job orientation (training), which they are planning to try online. During the time of the interview, they were analyzing the results of a Facebook survey to see people's opinions on the idea of an online training, and what topics/duration would be possible.

Shaghalni, another matching organization in the Egyptian market, adapted to the pandemic by creating virtual services, mainly virtual job fairs. They have a WhatsApp business account that jobseekers subscribe to, after which a Shaghalni person arranges for a meeting between the jobseeker and the employer. These jobs are mainly white and grey collar jobs such as those in sales

and call centers. They did not create these virtual job fairs for blue collared jobs as such services would need technology literacy and acceptance of the idea of using video in a professional setting; something that is not common in blue collared workers. Despite Shaghalni's efforts in adapting to the pandemic and providing services that accommodate for the current situation, the number of companies using these services was low, and getting jobseekers to commit to these online interviews was not always easy. The first virtual fair took place on June 2020 and until the time of the interview they had conducted three virtual fairs. Show up rates were much higher than offline fairs and they plan on continuing to use this method even as the economic and health conditions improve.

#### **Firms**

Finally, the research team talked with some firms' experts and representatives to assess the economic situation and how the pandemic had affected firms and hiring. At the time of the interview, most hires were replacements for critical positions. There was a freeze in recruitment in the region in addition to many layoffs. Country offices were negatively affected by regional headquarters, and the overall prospects were not very positive. There was a very limited market movement of labor as workers were afraid to leave their old jobs for something new in the current conditions. The hiring and employment situation differed by sector. FMCGs were doing better than heavy industries such as the automotive and cement industries. The solution for the bad conditions that firms are passing through would be consumption, and unless consumption increases, profits, operations, expansions, and hiring would remain negatively affected.

#### 6.2 Interview experiment during COVID-19

In response to the increasing unemployment caused by the pandemic and the inability to organize or participate in job fairs due to health precautions, we collaborated with Shaghalni in a nimble randomized experiment to help them increase interview attendance for their open days. Open days are whole-day interview invitations by a company for a group of jobseekers for selected jobs in the premises of the company.

We have participated in 4 open days with Shaghalni where we piloted remote interventions to increase firms' interview attendance. The experiment included different vacancies such as warehouse managers and keepers, accountants, drivers, sales representatives, and other similar jobs.

The study sample was randomly divided into 6 groups:

- 1. High incentive group: Got a high monetary incentive to cover the cost of interview attendance (transportation, internet package, other). We have tested this using 200 EGP
- 2. Low incentive group: Got a low monetary incentive to cover the cost of interview attendance (transportation, internet package, other). We have tested this using 100 EGP
- 3. Information on chances of getting the job: ~ number of shortlisted/number of total applicants.<sup>7</sup>
- 4. High incentive + Information: Got a high monetary incentive + Chances of getting a job
- 5. Low incentive + Information: Got a low monetary incentive + Chances of getting a job
- 6. Control group: Did not get monetary incentive or information, acted as the comparison group

Shaghalni sent a list of shortlisted jobseekers to the research team to be randomized. The team randomized the list using Stata into the 6 different groups and sent the list back to Shaghalni. Shaghalni sent WhatsApp messages to each treated individual in the sample with information related to their treatment. For example, figure 16 shows a WhatsApp message sent to the information only treatment, saying, "The company will be happy to meet you, you are one of the top applicants for this job". Another treatment message says, "We are reminding you with the interview date tomorrow, the company will be happy to meet you. As part of Shaghalni's efforts to support you in your job search, we would like to inform you that you will be given 100 EGP to cover your cost of attendance (transportation)." Disseminating the treatment over WhatsApp ensured the safety of the research team during the pandemic and allowed the project operations to adapt to the current situation while taking health precautions into consideration.

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<sup>&</sup>lt;sup>7</sup> In the case of many shortlisted applicants, instead of mentioning the precise percentage of those shortlisted, we tailor the message to say "you are one of the top applicants for this job".

Figure 16: WhatsApp messages sent by Shaghalni to shortlisted jobseekers

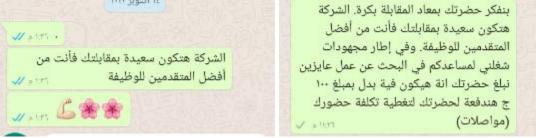


Table 13 shows results for interview attendance and job offer by treatment status. We see that all treatments, especially those getting monetary incentives, increased attendance relative to the control group. We also see that while both incentives were associated with higher attendance, giving a higher incentive was not more effective. The figures for job offers show a different pattern, where the higher incentive group got fewer job offers relative to the control and low incentive groups. This could point to the fact that the high incentive brings the wrong kind of people who are cash-constrained but not qualified for the job.

These results are still preliminary, and we plan on continuing this experiment with outside funding. It is worth mentioning that up until December, the sample included males only due to the nature of the jobs and employers' requirements.

Table 13: COVID-19 Nimble Experiment Results

	Control	Info	Low incentive		High incentive		Info+Low incentive	Info+High incentive	Obs
Attendance	0.202	0.085	0.185	**	0.173	**	0.051	0.142	322
	(0.100)	(0.077)	(0.075)		(0.077)		(0.077)	(0.087)	
Offer	0.093	-0.003	0.079	*	-0.007		-0.003	0.068	322
	(0.054)	(0.037)	(0.046)		(0.040)		(0.038)	(0.054)	

Notes: This table reports the differences between each treatment group and the control group across several implementation variables. Each row is the result of a regression of treatment assignment on the dependent variable. Standard deviations in brackets. Cohort and vacancy fixed effects. Significance \* .10; \*\* .05; \*\*\* .01.

## 7. Partnerships

In June 2017, Egypt's Ministry of Trade and Industry conducted a restructuring of our original partner; the Industrial Training Council (ITC) and its Social Fund for Development (SFD). The new single entity is called the Micro Small and Medium Enterprise Development Agency (MSMEDA). Ms. Niveen Gamea has been appointed as the head of this new entity. The research

team was successful in getting their approval and signature for an updated MOU in January 2017. Afterwards, the project was handed over to Engineer Medhat Masoud, director of the MSMEDA's central sector for Human and Community Development, and Ms. Suzan Abdelrasoul, Assistant Director General at MSMEDA.

During the restructuring, we acquired new partners and refined the research design. We have tried several street and online recruitment designs with the National Employment Pact (NEP) and concluded that door-to-door recruitment would likely be the most effective method to implement the study. Our partners for the baseline were Shaghalni.com and JobMaster, and all activities of this project have been under the umbrella of our government partner MSMEDA.

## 8. Capacity building

The project receives interns every spring for their course practicum, which usually lasts for a couple of months. The research team received three interns doing their master's in economics, Menna Awad, Mai El-Sayed, and Maram Darwish. They were involved in various tasks related to our partners MSMEDA and NEP. These included attending NEP orientation sessions and conducting interviews with the trainers to write a report on the session, helping MSMEDA update their database through doing desk research on the most promising industries in Egypt, as well as conducting interviews with factory representatives. They also did literature reviews, attended meetings with partners, and worked on the data to create summary statistics reports. We believed it was a beneficial experience for them to get exposure to different players in the development sector, in the form of a governmental agency and a local grass-root NGO, and get hands-on experience in RCTs and data cleaning.

Furthermore, Sara El Sarrag, who joined J-PAL as an intern in July 2019 after finishing her BSc in Economics, is currently a fulltime research associate at J-PAL. Her internship period at J-PAL has given her hands-on experience on RCTs and data analysis, promoting her from an intern to a part-time consultant and eventually to a full-time research associate.

Last but not least, the research team, composed of Norhan Muhab and Eslam Serag, has gained valuable experience in conducting RCTs, analyzing data, managing field operations, and gained a wide network of development practitioners and academics in the labor sector throughout their work with J-PAL on this project.

## 9. Policy Implications

To our knowledge, this is the first randomized experiment in Egypt that uses door-to-door surveying and treatment dissemination. Having tried different methods such as street recruitment and online ads, we concluded that door-to-door recruitment was by far the most successful method in gaining people's trust and getting them to attend a job matching service such as a job fair. This is useful on a policy level as it can be scaled up through field campaigns and using government community and social workers, especially in rural areas and Upper Egypt.

Furthermore, we see big differences in attendance rates between Upper Egypt, represented by Sohag and Cairo across all treatment arms. This sheds light on the need for more innovative ways to gain people's trust in Cairo as opposed to Sohag, where trust was established directly by the inperson recruitment and relationship developed between the data collectors and jobseekers. These geographical differences are useful for future research designs to gain a better context of the local environment of different regions in Egypt.

We also see interesting results regarding different treatment arms. Our expectation was that the more information jobseekers get, the higher the attendance would be. Instead, we saw that information about how the jobs available at the fair were "decent jobs" led to a decrease in attendance on average. This could mean that stressing this information could lead to an adverse effect, where jobseekers become suspicious and assume that such jobs are actually not decent. It is important to address that this was done in a careful manner, where information about work conditions and environment were tackled carefully and in a way that should not lead to suspicion and the opposite of the desired effect. Our results also show the importance of giving basic information and that transportation matters. Providing vouchers or free transportation to jobseekers would help reduce the financial burden on them and increase their attendance.

Finally, we have tried many recruitment strategies and were only successful in getting jobseekers to attend when attendance was directly linked to the potential of a job match/offer on the spot. Attendance for an information session or a job orientation training was not successful as jobseekers were not interested in spending their time on a far-fetched potential, no matter how useful it would have been for them. Taking this into consideration when designing future experiments or on a policy level when designing training programs is important as such programs have to be linked to a job opportunity to ensure satisfactory attendance.

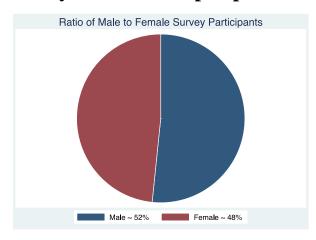
#### 10. Innovation of the Study

To our knowledge, this is the first study in the MENA region that tackles decent jobs, cash constraints, and labor market expectations in the MENA region. Most studies focusing on job fairs are concentrated in Ethiopia and India, constituting a large academic and policy gap in the MENA region. Our experiment aims at bridging this gap through involving policy makers and development practitioners in the study, as well as introducing detailed and rigorous data that has not been measured before in Egypt. This is the first quantitative dataset of labor market expectations and beliefs in MENA. Its use contributed not only to detecting gender and governorate differences in labor market perceptions, but also to pointing out heterogeneous effects of these beliefs and expectations and how they relate to job matching services, such as job fairs. Furthermore, the introduction of "decent jobs" in a study setting is the first of its kind in Egypt and is deemed necessary amidst the prevalence of informality and bad job conditions in the Egyptian labor market. Measuring jobseekers' perception of decent job conditions in the market and in job fairs as well as introducing a randomized intervention on decent jobs is the first of its kind in the region. We hope that such intervention would be the steppingstone of a series of studies and interventions that focus on decent jobs in Egypt and the MENA region by academics and policy makers.

#### 11. Ethical Considerations

This research project received IRB approval from the American University in Cairo. While the control group did not receive information or transportation reimbursements for attending the job fair, it was a necessary measure for the experiment to be able to measure the impact of these treatments. Any personally identifiable data such as name, address, national ID, and phone number are kept in an encrypted format and are removed from analysis datasets to ensure the respondents' privacy is maintained.

# Appendix A – Summary Statistics for pre-pilot street-level survey



## What is your main source of income?

	M	ale	Fer	nale	Tota	1
	No.	%	No.	%	No.	%
Formal job	201	24.9	114	15.1	315	20.2
Regular informal jobs	218	27	17	2.3	235	15.1
Part time job	10	1.2	2	0.3	12	0.8
Irregular informal job	93	11.5	28	3.7	121	7.8
Parents, family, personal savings etc	229	28.4	583	77.2	812	52
None	50	6.2	7	0.9	57	3.7
Other	5	0.6	4	0.5	9	0.6
Total	806	100	755	100	1,561.00	100

### What is the main reason for leaving the job? (For unemployed with working experience)

	M	ale	Fen	nale	To	otal
	N	%	N	0/-	N	%
	0.	70	о.	70	ο.	70
	13	78.	11	74.	25	76.
Voluntary unemployment (quit job)	5	9	8	2	3	7
	25	14.	27	17	52	15.
Involuntary (company closure, laid-off)	23	6	21	17	32	8

Seasonal unemployment (work available only during certain	10	5.8	6	3 8	16	18	
times of the year)	10	5.0	U	5.0	10	4.0	
Refuse to answer	1	0.6	8	5	9	2.7	
	17	10	15	10	33	10	
Total	1	0	9	0	0	0	

# Voluntary leaving job reasons

	#Obs	Mean
Males		
Unsatisfactory working conditions/Bad management	135	0.230
Salary	135	0.193
Employers changing their conditions after starting work	135	0.0667
Family circumstances (children, pregnancy, parents/husband not	135	0.0296
approving, etc.)		
Transportation	135	0.00741
Distance	135	0.00741
Other	135	0.259
Studies/Exams	135	0.304
Females		
Unsatisfactory working conditions/Bad management	118	0.186
Salary	118	0.178
Employers changing their conditions after starting work	118	0.0254
Family circumstances (children, pregnancy, parents/husband not	118	0.475
approving, etc.)		
Transportation	118	0.00847
Distance	118	0
Other	118	0.0763
Studies/Exams	118	0.127

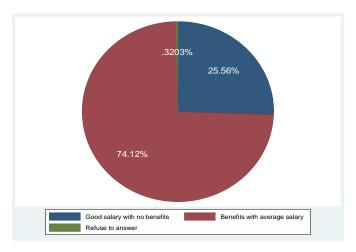
# **Employment statistics**

	#Observations	Mean
How many days a week do you work?	664	5.839
How many hours per day do you work?	664	8.932
How long does it take you (how many minutes) to get to work on average?	664	32.31
Wage/Day	516	70.78
Did you sign a contract with your employer?	663	0.256
Does your job offer benefits to you and your family?	663	0.208
How satisfied are you with your current work? 1 = not satisfied, 10 = very	659	6.182
satisfied		

# **Benefits Type**

	#Obs	Mean
Health insurance	138	0.899
Social security	138	0.739
Transportation/Transportation subsidy	138	0.217
Meal allowance	138	0.217
Life insurance	138	0.145
Loans	138	0.210
Other forms of compensation	138	0.0507

Which is more important for you, a good salary with no benefits or an average salary with job benefits?



# How did you get your job?

	#Obs	Mean
Online job portals	664	0.0211
Friend/family member working in the company	664	0.739
Filled out an application	664	0.158
Charity/NGOs	664	0
Mosque/Church	664	0.00151
Governorate Labor Office	664	0.0120
University Labor Office	664	0
Parliament member	664	0
Job fair	664	0
ITC Job fair	664	0
ITC programs	664	0.00151
Other	664	0.0979

## Job search

	#Obs	Mean
Are you actively searching for a	1561	0.489
job?		
How many hours per day do you	763	2.194
spend searching for a job?		

#### Job search methods

	#Obs	Mean
Online job portals	763	0.494
Family/Friends	763	0.937
Charity/NGOs	763	0.0813
Mosque/Church	763	0.0288
Registered in a government office	763	0.0747
Registered in a University office	763	0.0249
Parliament member	763	0.0197
Attended job fairs	763	0.0262
Applying directly to the company	763	0.379
Entered government job lottery competition	763	0.102
Arranged to get financing for a private project	763	0.109
Registered at a recruitment website online	762	0.206

## Job fairs

Are you familiar with job fairs?	1561	0.161
Have you even been to a job fair?	252	0.27

# Main barrier preventing you from going to a job fair

	#Obs	Mean
Transportation to and from the job fair	1561	0.213
It is too costly in general to go to a job fair	1561	0.141
Lack of trust	1561	0.104
The jobs at the job fair won't be jobs I am interested in	1561	0.0218
I never hear about a job fair taking place (No publicity)	1561	0.375
I don't believe that I will find a job at the job fair	1561	0.222
I am not familiar with the kind of jobs being offered	1561	0.198
Refuse to answer	1561	0.0436
Distance/Location	1561	0.0211
Other	1561	0.0846

# What costs are associated with you attending a job fair?

	#Obs	Mean
Male		
Transportation	806	0.95
Clothes	806	0.26
Food	806	0.24
Other	806	0.01
Female		
Transportation	755	0.94
Clothes	755	0.23
Food	755	0.18
Other	755	0.00
Total		
Transportation	1561	0.94
Clothes	1561	0.24
Food	1561	0.21
Other	1561	0.01

# What information would encourage you to attend a job fair?

	#Obs	Mean
Male		
Number of vacancies	806	0.39
Companies recruiting	806	0.47
Salaries offered	806	0.64
I would come anyway	806	0.24
Other	806	0.03
Female		
Number of vacancies	755	0.29
Companies recruiting	755	0.23
Salaries offered	755	0.43
I would come anyway	755	0.37
Other	755	0.01
Total		
Number of vacancies	1561	0.34
Companies recruiting	1561	0.35
Salaries offered	1561	0.54
I would come anyway	1561	0.30
Other	1561	0.02

# Appendix B – Intervention Flyers

#### Basic Flyer



Flyer with decent job information



Flyer with information on wages



Transportation voucher

