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IZA DP No. 10537

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ABSTRACT

The Relative Returns to Education, Experience, and Attractiveness for Young Workers[1]

Understanding employer preferences for characteristics of young workers is crucial to designing effective policies to reduce youth unemployment in developing countries. We conduct a randomized resume audit study, simultaneously examining the returns to education, experience, and physical attractiveness among young workers applying for entry-level jobs in a developing country context. Employers do not value college experience without a degree. Postsecondary vocational training increases the likelihood of a callback, but only for blue-collar occupations typically offered only to male workers. Work experience is valued across most occupations; however, among service-sector jobs with in-person customer interactions, attractive applicants receive 23 percent more callbacks, swamping the returns to experience. Our results can guide policymakers in the design of labor market programs to reduce youth unemployment as well as help young workers make optimal choices to ease their school-to-work transition.

JEL Classification: J23, J24, J70, C93

Keywords: returns to education, school-to-work transition, audit study, labor demand, returns to experience, attractiveness

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1. Introduction

Over the past three decades, youth unemployment rates in developing countries have been nearly three times higher than adult unemployment rates (ILO, 2012). Youth who do find employment are disproportionately represented in the informal economy, where they often face difficulty transitioning into permanent, formal employment (Autor and Houseman, 2010; Kvasnicka, 2009). In response to these concerns, various developing countries have implemented large-scale interventions that attempt to mitigate youth unemployment through wage subsidies (Groh et al, 2016a), technical and vocational training programs (Blattman et al., 2013; Hirschleifer et al, 2014; Card et al, 2007; McKenzie and Woodruff, 2016), and soft-skills training (Groh et al., 2016b; Blattman et al, 2016). The results of these studies are mixed, with most finding that these seemingly promising yet often expensive programs have little to no effect on labor-market outcomes (Blattman and Ralston, 2015).

Often, the impetus for and design of these interventions reflects political factors (Blattman and Ralston, 2015) or self-reported employer surveys and anecdotes about necessary skills, rather than through revealed employer preference. If labor-market interventions fail to provide the specific skills employers are looking for during the hiring process, then it may not be surprising that the measured impacts are small. Causal evidence on the explicit determinants of labor demand for young workers is limited, yet it is critical for identifying the types of programs that are likely to increase youth employment.

In this study, we causally identify employer preferences for young workers' skills and characteristics in a developing country context. We conduct a randomized resume audit study to identify the impact of gender, age, postsecondary schooling (including technical and vocational training), work experience, and physical appearance on labor-market demand for recent high

school graduates in the Philippines, a country with high youth unemployment. We submit 7,172 resumes to 1,793 job-postings in metropolitan Manila between October 2015 and March 2016. As in many developing countries, resumes in the Philippines typically include an applicant photograph. We submit all resumes with photos that we collected from young Filipinos, and we measure their physical attractiveness based on evaluations from Filipino raters. We focus on high school graduates due to the recent rise in secondary school graduation rates in developing countries, and the high level of interest among researchers and policymakers in ensuring a smooth transition to the workplace for this group (Ryan 2001).

Conditional on meeting the minimum requirements listed in job postings, applicants with additional education and work experience may be more appealing for two reasons: their additional human capital may increase their productivity and also may signal that they are of higher quality (Spence 1973). Applicants' gender may be important if employers have a distinct preference for employees of a certain gender (Becker, 1957) or if there is a correlation between gender and applicant productivity (Aigner and Cain, 1977). In a similar fashion, attractiveness may be rewarded if it increases productivity, if it is associated with harder-to-observe traits like confidence, or if the employer has a specific taste for more attractive workers (Hammermesh and Biddle, 1994; Mobius and Rosenblat, 2006).

In our sample, 22.8 percent of resumes receive a callback for a job interview. Looking across all applicants and occupation types, we find that neither a postsecondary technical and vocational education training (TVET) diploma nor two years of college affect the likelihood of receiving a callback. Work experience, on the other hand, increases callback rates by 2.4 percentage points (11 percent). The returns to work experience are nearly identical for one and two years of experience, suggesting either that the returns to human capital gained on the job beyond the first

year are relatively small or that the returns to experience are primarily a signal of unobservable worker quality rather than accumulated human capital. Physically attractive applicants are 2.0 percentage points (9 percent) more likely than unattractive applicants to receive a callback, a magnitude similar to the work-experience premium.

As in other developing countries, the Filipino entry-level labor market is highly gendered, with nearly two-thirds of postings requesting applicants of a specific gender.[2] Most gender-specific occupations are open only to men; as a result, only 45 percent of all jobs are open to women, while 91 percent are open to men. However, after conditioning on these explicit gender preferences among employers, we find no overall effect of applicant gender on callback rates within postings open to both genders.

We compare the returns to education, experience, and attractiveness across occupation sector (i.e., service and administration, laborers, skilled trades, and call centers), gender requirement (i.e., men-only, women-only), type (i.e., blue-collar, white-collar), and skill- and wage-level. We find that the zero returns to TVET mask considerable heterogeneity. Workers with a TVET certification in fields such as electrical installation and automotive servicing applying to blue-collar jobs are 2.1 percentage points (10 percent) more likely to receive a callback, while workers with certification in fields such as entrepreneurship and office administration see no such return when applying to white-collar jobs.

We find that work experience is most important for service and administrative workers and for skilled-trade workers. Further, the returns to attractiveness are large and statistically significant (5.3 percentage points or 24 percent) in service and administrative occupations, such as sales,

[2] The use of explicit preferences in job postings is common in other developing countries such as China (Kuhn and Shen, 2013), particularly among lower-skilled positions, and Mexico (Hellester et al., 2016).

food service, and receptionist positions; there is zero effect of attractiveness for all other employment sectors and for jobs open only to men. Finally, we find that for job postings open to both genders in blue-collar occupations, men are 6.4 percentage points (31 percent) more likely than equally qualified women to receive a callback, suggesting substantial gender discrimination in this sector.

We test for interactions between the returns to education, experience, and appearance, as well as whether the returns to these characteristics vary with gender. We find no evidence of interactions between education, experience, and attractiveness. However, comparing applications within job postings that are open to both genders, we find suggestive evidence that the returns to attractiveness are higher for female applicants.

These findings contribute to our understanding of labor markets for young workers in developing countries in several ways. First, by estimating the returns to work experience and education simultaneously, we find that for entry-level jobs, employers rely primarily on work experience rather than education as a signal of applicant quality. For policymakers and job-seekers, the results indicate that additional investments in postsecondary education, at least in the absence of acquiring a degree, are unlikely to lead to greater employment opportunities among entry-level positions. However, accumulating any formal work experience, even unpaid, may help individuals make it over the first screening hurdle.

Second, the explicit restrictions on applicants' gender in the labor market, combined with gender discrimination in blue-collar occupations indicate that addressing both institutions (i.e. the legality of gender-based hiring) and employer preferences may be important to expand labor-market opportunities for women, particularly in traditionally male-dominated sectors. Third, while many students in developing countries pursue technical and vocational training in

programs aimed to improve their employment prospects for entry-level white collar jobs, we find that these investments are largely unrewarded.

Finally, unlike previous studies on physical appearance (Bóo et al. 2013; Galzarda and Yamada 2014; Ruffle and Shtudiner 2014), we compare the value of attractiveness relative to other labor-market investments, finding that the returns to attractiveness swamp the returns to postsecondary education, vocational training, or work experience in the service and administrative sector. Thus, for young workers applying to entry-level white-collar jobs with face-to-face customer interactions, such as food service, sales, and receptionist positions, applicants may be better served making additional efforts toward grooming or wardrobe enhancements than investing in postsecondary education, TVET, or obtaining work experience.

Our study also informs governments and policymakers about optimal design of programs to combat youth unemployment. We find substantial heterogeneity across occupations in employer preferences for worker characteristics, suggesting that a one-size-fits-all training or skill enhancement program may be less effective than one tailored to the needs of specific sectors. Further, our study opens pathways for future research, suggesting that training to emphasize the importance of physical appearance and suggest ways to appear more attractive and professional to employers could be a low-cost and high-impact intervention to alleviate youth unemployment.

2. Education and the Labor Market for Young Workers in the Philippines

Like many developing countries, the Philippines struggles with high rates of underemployment and low rates of participation in the formal sector, especially among youth, making it a suitable context for this study. Approximately 16 percent of youth ages 15-24 are unemployed, more than

twice the overall rate. These unemployed youth make up nearly half of all unemployed persons in the Philippine labor force.[3] The challenge of finding work is particularly pronounced for those without postsecondary schooling; a 2008 Asian Development Bank (ADB) survey in the Philippines found that while 75 percent of college graduates find work within a year of graduation, only 20 percent of those with only a high school education do (ADB 2012).

Even for those able to find work, it is often temporary, low skilled, and poorly paid. Among youth ages 18-25 employed in private or public establishments, more than one-third are explicitly temporary, and the underemployment rate is 36 percent. Additionally, nearly one-quarter of youth in metro Manila earn less than the established daily minimum wage (approximately $8.50).[4] This shortage of suitable jobs incentivizes workers to invest in their own human capital in order to stand out, and it enables employers to be selective when screening applicants.

We focus on the labor-market outcomes of recent high school graduates. At the time of this study, primary and secondary education in the Philippines was 10 years in duration, with 6 years of primary education and 4 years of secondary education.[5] Based on the 2010 Philippine Census of Population, approximately 58 percent of the total population has a high school degree, while 84 percent have completed primary school. Among individuals aged 18-25, 67 percent have a high school degree and 90 percent have completed primary school. These rates are comparable to many lower-middle-income countries (World Bank 2017).

[3] Further, less than half of 15-24 years olds are in the labor force. These statistics are from the authors' calculations using 2009-2011 Philippine quarterly Labor Force Surveys.
[4] Authors' calculations using 2009-2011 Philippine Labor Force Surveys.
[5] In June 2016, the Philippines shifted from a 10-year education system to a 12-year system. Our study concluded in March 2016, prior to the adoption of this new system.

Because of the 10-year education system, on-time graduation from high school usually occurs at age 16. Upon completion of high school, students have a number of options: enroll in a college or university, pursue a TVET certification, seek and obtain a job, invest in self-employment, or remain idle. Excess labor supply combined with additional employment restrictions under the Philippine labor code limits formal labor-market opportunities for high school graduates under age 18. As a result, employment opportunities for these younger workers are largely confined to the informal sector. For this reason, we focus our study on 18- and 19-year-olds, as these are the youngest workers broadly applying for formal sector employment.

3 Methodology

We conducted a randomized resume audit survey to measure the returns to work experience, education, and attractiveness among formal, entry-level jobs in the Philippines. This methodological approach, which sends fake resumes with randomly assigned characteristics of interest to real job postings, has been used in a range of areas, including measuring discrimination in both developed and developing country contexts (Bertrand et al. 2004, Banerjee et al. 2009), and determining the labor-demand response to specific applicant characteristics such as school prestige (Deming at al. 2016), return migrant status (Abarcar, 2015), and physical appearance (Bóo et al. 2013; Galzarda and Yamada 2014; Ruffle and Shtudiner 2014). Between October 2015 and March 2016, we submitted 7,172 resumes to 1,793 job postings, submitting 4 resumes per posting and only 1 posting per employer. We tracked each posting and employer to avoid submitting a new set of applications to duplicate postings or to other postings by the same employer.

3.1 Resume Characteristics

We collected sample resumes from online job-posting sites to generate realistic resume templates, work experiences, and education profiles. See Appendix Figures 1 and 2 for sample resumes. We generated a set of names based on the most common first and last names in the Philippines,[6] and we chose addresses and corresponding nearby high schools in metro Manila.[7] We also generated a database of past employers, skills, trainings/seminars, and references, with each tailored to reflect the applicants' addresses (references) or the nature of the position (employers, skills, and trainings/seminars).

For each resume, we randomized the following key characteristics, using resume randomization software created by Lahey and Beasley (2009): age (18 or 19)[8], education (no postsecondary education, two years of education at a four-year postsecondary institution, or a postsecondary TVET certificate[9]), and work experience (0, 1, or 2 years). Conditional on having some postsecondary education or work experience, the software randomly selected a school name, course, and/or employer based on the position. When the job posting specified a particular gender, we chose the gender of the applicant accordingly. Otherwise, we selected gender randomly.

In the Philippines, as in many developing countries, most applicants include a photo in their resume (Hellester, Kuhn, and Shen, 2016). We collected 64 pictures from young Filipinos in a

[6] We obtained common first names from the Philippine Statistical Authority (https://psa.gov.ph/content/most-common-filipino-names-2005) and common surnames from tagaloglang.com (http://tagaloglang.com/most-common-filipino-surnames).
[7] Random assignment of address allows us to examine the effect of: 1) living near the potential employer, and 2) living in a wealthier neighborhood, as measured using an asset index created using the 1990 Filipino Census. In results not shown, but available upon request, we find zero effect of either of these location measures on callback.
[8] This characteristic is not of immediate interest for this study, but we preferred to include multiple ages among young workers to make sure the results were not age specific.
[9] Appendix Table 1 includes examples of TVET certification options by position type.

neighboring province and randomly assigned these to the applicant profiles. We simultaneously submitted these photos to 50 Filipino online contractors using Upwork, an online freelancer hiring platform, who assessed each picture for attractiveness on a scale from 1 (least attractive) to 7 (very attractive).[10] Figure 1 shows the overall distribution of attractiveness ratings. We classify photos as "attractive" if the average attractiveness score exceeds the median score by gender.[11] The median rating is 3.40 for women and 3.27 for men.

We also randomized the following characteristics, sampling without replacement from the pool of potential values for each job posting: applicant name, applicant address, height, weight (based on height),[12] high school name, employer (when applicable), seminars and trainings completed (randomized within a pool specific to each job category), and references. [13]

3.2 Posting Selection

We selected postings using popular job-posting websites and newspapers. Field officers recorded all job postings for employers located in the National Capital Region (metro Manila) that met our screening criteria: were open to 18- and 19-year-olds, did not require work experience, and had no additional education requirements beyond a high school diploma. When an employer had multiple positions available or multiple postings, we randomly selected one posting to which to submit resumes. We randomized the order of application within each batch of collected postings, and we refreshed each set of postings weekly, as the supply of postings typically exceeded the number we could submit.

[10] The Upwork contractors were evenly split between men and women, and had an average age of 31 years.
[11] We find no evidence of differential attractiveness effects at the 25th or 75th percentiles.
[12] Heights and weights were not provided to the Upwork contractors evaluating the applicant photographs. We find no effects of height, weight, or weight for height, overall, thought there are suggestive positive returns to height in the service sector and negative returns to height for call-center positions.
[13] College, course, high school, seminar, training, and employer names were taken from past resumes submitted to online job-posting sites and chosen to be of comparable and approximately average quality.

We initially concentrated applications to postings made on jobstreet.com.ph, indeed.com.ph, ph.jobsdb.com, phil-job.net, and the JobSearch@Philippines Facebook page. However, the majority of postings were for call-center positions, particularly at jobstreet.com.ph, and we later added job ads from newspaper classifieds, particularly those published in the weekly Manila Bulletin. Overall, 80 percent of postings were from online sources and 20 percent were from print sources. See Appendix Table 2 for the full distribution of job-posting sources.

3.3 Estimation Strategy

The random assignment of education, work experience, and attractiveness in our study facilitates a straightforward estimation strategy. We identify the causal impact of each of these randomized resume characteristics on the callback rate by estimating the following equation using ordinary least squares:

$$Call_{ij} = \alpha + \beta Female_{ij} + \delta_1 SomeCol_{ij} + \delta_2 TVET_{ij} + \theta Exp_{ij} + \rho Grad2013_{ij} + \gamma Attractive_{ij} + X_j'\vartheta + \varepsilon_{ij} \quad (1)$$

where *Call* is an indicator (i.e., a binary variable) that applicant *i* to position *j* received a callback, *Grad2013* is an indicator that the applicant graduated in 2013 (approximately 18 years old) rather than in 2012 (approximately 19 years old), *Attractive* is an indicator that the applicant's photograph had an above-median attractiveness rating, *Exp* is an indicator that the applicant had previous work experience, *TVET* is an indicator that the applicant earned a technical-vocational certificate, and *SomeCol* is an indicator that the applicant completed two years of college.

We add a set of position-specific controls, X_j. These controls include indicator variables for whether the position is open to women only or men only, and in some specifications they include field officer and day of submission fixed effects. Our preferred specification includes job-posting

fixed effects, which enables us to identify causal effects based on differences in callback rates *within* employers, and makes redundant the other position-specific controls. We report standard errors clustered at the job-posting level.

The job postings in our study represent a wide range of entry-level occupations available to Filipino workers who have completed a high school diploma. See Appendix Table 3 for the complete distribution of job posting occupations: the five most common occupations, comprising 55 percent of our sample, are drivers, sales clerks, technicians, wait-staff, and receptionists.[14] For the majority of project, we excluded postings for call-center positions, as the call-center recruitment process is not conducive to this type of audit study. We learned that recruiters often call all applicants and conduct their initial screening via phone interview, resulting in artificially high callback rates. Additionally, call centers often outsource their hiring process to larger firms or pass applicant details between firms, making it difficult to only submit four applications per posting and one per employer. We include resumes submitted to call-center postings in our analysis, but our results are robust to excluding them.

Table 1 presents the descriptive statistics of the 7,172 resumes that were submitted for all resumes (column 1) and separately depending on the gender restrictions of the job posting (columns 2-4). Overall, 22.8 percent of submitted resumes received a first-round callback. However, in 82 percent of postings, the employer either called back all four submitted resumes or none; see Figure 2 for the distribution of callback rates by posting.[15] Figure 3 presents the

[14] The next five most common occupations, together comprising an additional 20 percent of the sample, are cooks / food prep workers, call centers workers, delivery-persons, promodisers (sales merchandiser/product promoter), and electricians.

[15] While our preferred specification that includes job-posting fixed effects only relies on 322 job postings for identification, our results are nearly identical to those that include posting-specific characteristics only (see Table 2). This is likely because there are relatively few observable differences in the characteristics of employers between those who call back all or no applicants versus those who call back 1, 2, or 3 applicants (see Appendix Table 4).

number of days to callback, conditional on receiving a callback. On average, employers took slightly less than a week to callback applicants, though nearly 30 percent called back on the same day of application. Three-quarters of callbacks came by text message, about one-third came by phone call, and nearly one-quarter by e-mail.[16]

For many positions, the callback itself consisted of a second round of screening; recruiters asked field officers detailed questions about their qualifications; for call-center positions in particular, these questions were often conducted in English and appeared to serve as a way to gauge applicants' communication skills. In some cases, this callback led to an immediate job offer, while in others it led to an invitation for additional testing or an in-person interview. To avoid raising employer suspicions while minimizing the impact on employers, field officers initially agreed to further testing, and they then would follow up later to cancel.

Some characteristics – graduation cohort and gender (where applicable) – were stratified within job posting, while others – education, work experience, and profile picture, were randomly chosen without replacement but were not explicitly stratified. Table 1 indicates the distribution of each characteristic. The distributions are what we would expect based on random assignment: approximately half of resumes have a 2013 high school graduate, a photograph rated attractive, and a female applicant (when the position is open to men and women); one-third have some college, one-third have TVET (and one-third no postsecondary education); and two thirds have work experience.[17]

Table 1 demonstrates that the entry-level labor market is highly segregated by gender. Only 647 of 1,793 postings (36 percent) are open to both men and women. Among the remaining sex-

[16] Shares exceed one because 23 percent used multiple methods to contact applicants.
[17] One-third have no experience, one-third have one year of experience, and one-third have two years of experience, hence the two thirds having any experience.

segregated postings, 82 percent were only open to men, and 18 percent were only open to women. This explicit segregation is a likely explanation for why we find relatively little evidence of gender discrimination in our results, as we can only measure the impact of being female for those positions open to both men and women. Table 1 shows the distribution across postings of employment sector overall and based on the positions' intended gender. While only 37 percent of all postings were in the service or administrative sectors, these jobs reflect nearly three-quarters of those open to both men and women, as well as those of open only to women. Among positions open only to men, over two-thirds were in skilled trades, with the balance comprised mostly of unskilled laborers.

4 Results

4.1 Main Results

Column 1 in Table 2 presents the first set of regression results based on equation (1), including as the only control an indicator for whether the position is open to women only or men only. We find no statistically significant difference in callback rates for women relative to men; that is, among positions open to both men and women, employers do not prefer applicants of one gender over the other. Callback rates are 2.7 percentage points higher for those with previous work experience and 1.7 percentage points higher for attractive workers. Neither some college nor TVET affect callback rates; these estimates are small in magnitude and statistically indistinguishable from zero.

The results in column 2 add job-category fixed effects,[18] and the results in column 3 add posting characteristics and job-source fixed effects.[19] Including these covariates does not change the magnitude of our estimates, but it does increase the explanatory power of our regressions, raising the R-squared term from 0.008 in column 1 to 0.044 in column 2 and to 0.146 in column 3.

Including field-officer and day-of-submission fixed effects increases the precision of our estimates slightly while leaving the magnitudes largely unchanged (column 4). In our preferred specification, we replace these fixed effects and position-specific covariates with job-posting fixed effects (column 5). The estimates are largely unchanged between columns 4 and 5. Work experience increases callback rates by 2.4 percentage points (10.5 percent), while attractiveness increases callback rates by 2.0 percentage points (8.8 percent). Both results are statistically significant at the one-percent level.

The estimated impact of work experience pools both those with one year and two years of experience. In Appendix Table 5, we test whether the returns increase with additional experience, and we find that the two coefficients are nearly identical (2.3 percentage points for one year, 2.5 percentage points for two years). This similarity suggests either that the returns to human capital gained on the job beyond the first year are relatively small or that the returns to experience are primarily a signal of unobservable worker quality rather than accumulated human capital.

[18] These categories are service workers, driver/heavy equipment operator, skilled trades, laborer, office/admin, call center, cleaner/caregiver, factory/machine operator, and other.

[19] The posting characteristics include age requirements, required and desired experience, required and desired education, and skills requested. For skills requested, we include an indicator for whether any skills were requested, indicators for whether skills in driving, English, communication, or computers were requested, and indicators for whether the ad requested applicants who had a "pleasing personality, or were "hardworking." These skills and traits were among the most common requests made in the job-posting ads.

We find no evidence of a cohort effect; conditional on work experience and education, employers do not prefer 18-year-olds to 19-year-olds, or vice versa. Note that this age effect also incorporates a "time idle" effect or "unemployment penalty." While we do not explicitly vary unemployment while holding other factors constant, given that students typically graduate high school at age 16, we might expect that an 18-year-old (i.e., 2013 high school graduate) with two years schooling, no experience, and therefore no unemployment might be in higher demand than a 19-year-old (i.e., a 2012 high school graduate) with two years schooling, no experience, and an implied one year unemployment. The near-zero point estimate on the 2013 cohort (i.e., age 18) dummy suggests that there is either no cohort effect and no unemployment effect or that the positive effect of being age 19 exactly cancels out the negative unemployment effect.

4.2 Heterogeneity of Results

In Table 3, we consider how demand for experience, education, and attractiveness differs by job sector and genders to which the job is open. We group jobs into four main employment sector categories based on job title: service and administrative workers, laborers, skilled-trade workers, and call-center workers.[20] We also group jobs into blue-collar and white-collar positions by matching job titles to the 2008 International Standard Classification of Occupations (ISCO-08).[21]

A few clear patterns emerge. First, employers in laborer and blue-collar occupations strongly prefer male to equally qualified female workers. Note that given the posting fixed effects this result is identified off of postings open to both genders. Second, the zero returns to TVET across all job types masks considerable heterogeneity. Workers applying to jobs that are only open to

[20] We exclude submission to 20 job postings (1.2 percent) that could not be clearly grouped into one of these four categories.

[21] See http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf for job titles. We classify codes 6-9 as blue-collar, which includes skilled agriculture, crafts and trade workers, plant and machine operators, and elementary occupations.

men have a 2.3 percentage point (11.6 percent) greater chance of receiving a callback with a TVET degree, and this effect is similar, though only marginally statistically significant, among blue-collar occupations. Third, work experience is most important for service and administrative positions and skilled-trade workers, with no statistically significant effect among laborer positions or among call-center positions.

Finally, the returns to attractiveness are large and statistically significant (5.3 percentage points; 24.4 percent) in service and administrative positions and in white-collar occupations (4.2 percentage points; 16.7 percent). There is zero effect of attractiveness for all other employment sectors, for blue-collar occupations, and for jobs open only to men.[22] Thus, for service and administrative workers, being attractive increases the probability of receiving a callback by nearly twice as much as having prior work experience; among all white-collar positions, the attractiveness premium is still more than 150 percent of the experience premium.

We also test whether the returns to one versus two years of work experience are equivalent across position type and in jobs open only to applicants of a specific gender (Appendix Table 5). There is some evidence that for positions open only to women, the return to one year of prior experience is greater than two years (8.1 percentage points vs. 1.5 percentage points, significant at the 10-percent level), suggesting that the signaling effect might be most important for applicants to female-dominated positions.

In Table 4, we further disaggregate job postings into specific occupations, presenting results for the ten most common occupations we collected. While our statistical power is limited among

[22] These differences are all statistically significant. For example, the p-values from tests of equality for the attractiveness coefficient for service/administrative jobs versus laborers, skilled trades, and call centers, is 0.005, 0.005, and 0.058, respectively. Grouping those three sectors together and testing against the service sector, the p-value is 0.001.

these more specific occupation categories, two patterns emerge: First, TVET has a large and statistically significant effect on callback for both drivers and delivery workers (18 percent and 37 percent, respectively), two occupations in the skilled trades category. Given that drivers and delivery workers are almost exclusively male, these occupation results help explain the statistically significant impact of TVET on male workers. There are large and statistically significant effects of attractiveness in sales, food service (i.e., wait-staff), and administrative/ receptionist positions – all positions in which face-to-face customer interactions are important. In all three cases, attractiveness trumps work experience in terms of increasing the likelihood of callback.

While returns to physical attractiveness appear large, it may be that attractiveness primarily has a payoff in low-skill or low-wage jobs, so that attractiveness leads to greater employment likelihoods, but only for less desirable positions. We explore this issue in two analyses presented in Table 5. First, we divide all job postings into (relatively) low-, medium-, and high-skill occupations by matching job-posting titles to the ISCO-08. Second, we divide all job postings into low- and high-wage occupations, using average wages among young workers in these occupations in the 2009-2011 quarterly Philippines Labor Force Survey (LFS).[23] We find no evidence that the returns to attractiveness are concentrated among the lowest skill or lowest wage occupations. The returns to attractiveness are nearly identical across low- versus high-wage occupations, and they are concentrated in medium-skill level occupations.

The final test for heterogeneity that we conduct is whether the returns to education, experience, and attractiveness interact with each other or with the gender of the applicant. This analysis tests

[23] We use the 2009-2011 quarterly LFS and restrict to 18-21 year-old high school graduates (with no more or less education) in metro Manila. We match our job-posting occupations to those in the LFS using the Philippines Standard Occupation Codes (PSOC). Our wage calculations are based on 6,755 workers in these occupations.

whether education and experience are compliments or substitutes, and it examines whether these characteristics are more important for men or women, in those occupations open to both genders. Column 1 of Table 6 reports results from our preferred specification after interacting the indicator for some college with each of the other resume characteristics of interest (i.e., female, experience, and attractiveness). Column 2 includes the same interactions for TVET, column 3 for experience, and column 4 for attractiveness.

Overall, we find little evidence of interaction effects between the return to these characteristics. Only the interaction between attractiveness and TVET is statistically significant (at the 10-percent level), and we cannot reject the null hypothesis that these interaction terms are jointly zero (p-values all greater than 0.15). The interaction of attractiveness and female is 1.7 percentage points, suggesting returns to attractiveness that are nearly four times greater than those for men (2.3 percentage points for women vs. 0.6 percentage points for men), though the interaction term is not statistically significant.

One possible concern with our results is that employers may not trust information from an applicant who is 18, has two years of college, and has two years of work experience, given that he would have graduated high school two years ago. Alternatively, employers may interpret the work experience as having been part-time. We find that our results are robust to excluding these applicants, which suggests that this concern does not play a major role in employer decisions. Still, it is possible that employers may perceive any work experience of an applicant with two years of college to be part-time, and perhaps of less quality.[24] The point estimate on the interaction between some college and work experience in Table 6 of -1.3 percentage points is consistent with this story, though it is not statistically significant.

[24] According to the 2009-2011 Philippines Labor Force Survey, 16-19 year old workers who are in school work an average of 34 hours a week, while those not in school work an average of 54 hours a week.

5. Conclusions

Youth unemployment is a serious concern in developing countries, and yet we know little about how employers value characteristics of young workers, particularly in the developing world. Through a randomized audit design, we test the returns to work experience, education, and physical attractiveness in the Philippines, a developing country with high youth unemployment.

We find that employers do not value two years of college experience. Employers do value TVET training, but only in blue-collar occupations: resumes with TVET certifications submitted to those types of job postings were 2.1 percentage points (10 percent) more likely to receive a callback. We find that work experience increases the probability of callback by about 2.4 percentage points (10.5 percent), with effects concentrated in service, administrative, and skilled-trade occupations. Finally, we find that attractiveness matters, particularly in the service sector, in which the returns to attractiveness of 5.3 percentage points (24.4 percent) swamp those from education or experience.

Our audit survey methodology enables us to get a real-time, revealed preference, market-based measure of employer demand, though it comes with three important caveats. First, these findings speak only to employment and not to wages. It is possible that wage returns to the characteristics we measure may differ from their employment returns. Second, while we aim to collect job postings from a comprehensive set of newspapers and online job postings, these may not be fully representative of the actual range of jobs available to job-seekers; in particular, we exclude, by necessity, jobs that can be acquired through informal channels or social networks.

Third, employers may also screen jobseekers by explicitly listing minimum qualification levels for criteria. In this study, we hold these minimum qualification levels constant, applying only to positions that do not explicitly require work experience or postsecondary education, are open to 18- and 19-year-olds, and only submitting resumes on behalf of applicants of the required gender. In this respect, our findings necessarily understate the general returns to experience and education across the labor market. On the other hand, this sample restriction enables us to consider how, when faced with a pool of qualified applicants with a range of backgrounds, employers select the most promising applicants. Understanding this aspect of employer demand is particularly important in developing countries like the Philippines, which have a surplus of relatively low-skilled labor.

In spite of these limitations, our results provide policy-relevant evidence on labor-market demand for young workers in developing countries. In particular, our study provides several lessons for such workers seeking to improve their short-run labor-market prospects. First, work experience matters, even for low-skilled positions. Any efforts to attain formal work experience, even unpaid, will be helpful in attaining a job. Second, while 16.7 percent of young workers in the Philippines have acquired some college experience without completing a degree,[25] we find that this provides little to no help in acquiring employment in the set of entry-level jobs that we consider. Third, steps made toward improving one's physical appearance can have large payoffs for attaining jobs with face-to-face customer interactions.

Finally, many students in developing countries pursue technical and vocational training in basic software skills, entrepreneurship, office administration, and other programs aimed to improve their employment prospects for entry-level white collar jobs. We find these investments are

[25] 2009-2011 Philippine Labor Force Survey and authors' calculations.

largely unrewarded in the entry-level labor market. It is possible that the limited effectiveness of many training programs evaluated in developing countries may reflect the training occurring in fields in which the certifications are not valued by employers. Our study provides a cost-effective way to help academics and researchers understand which worker characteristics are most important when developing effective interventions to reduce youth unemployment.

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Table 1. Resume and Job-Posting Characteristics

		By Gender Requirement - Open to:		
	All	Both Genders	Men Only	Women Only
	(1)	(2)	(3)	(4)
Resume Characteristics				
Female	26.8%	49.7%	0.0%	100.0%
Some college	32.9%	33.1%	32.5%	34.0%
TVET	33.3%	33.0%	33.6%	32.5%
Experience	66.4%	65.9%	66.6%	66.5%
2013 graduate	50.0%	50.0%	50.0%	50.2%
Attractive	52.1%	52.4%	52.3%	49.4%
Occupation Sectors				
Service/admin	36.8%	71.9%	8.2%	71.1%
Laborer	14.6%	4.8%	21.1%	14.5%
Skilled trades	42.8%	8.8%	69.7%	13.8%
Call center	4.7%	12.7%	0.2%	0.0%
Other	1.2%	1.9%	0.8%	0.6%
Mean Days to Callback	6.7	5.5	8.0	5.8
Callback Received Via:				
Text	76.6%	87.8%	75.8%	71.5%
Phone call	24.7%	23.5%	26.1%	22.6%
E-mail	22.1%	25.2%	20.1%	18.5%
Job Posting Source:				
Online	79.5%	89.2%	75.6%	65.4%
Newspaper / print	20.5%	10.8%	24.4%	34.6%
Sample Size:				
Postings	1793	647	987	159
Applications	7172	2588	3948	636
Callbacks	1634	677	782	175
Callback Rate	22.8%	26.2%	19.8%	27.5%

Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016. 1) Some college, 2) TVET, 3) Experience, and 4) Attractive, are indicator variables equal to one if the applicant 1) completed two years of college, 2) completed a postsecondary technical-vocational certificate in an area relevant to the job posting, 3) has one or two years of experience relevant to the job-posting occupation, and 4) has resume photo in the top half of the attractiveness distribution within gender.

Table 2. Effects of Resume Characteristics on Callback Rates

	(1)	(2)	(3)	(4)	(5)
Female	-0.006	-0.005	-0.007	-0.008	-0.006
	[0.010]	[0.010]	[0.010]	[0.010]	[0.011]
Some college	0.001	0.003	-0.001	-0.001	0.004
	[0.013]	[0.012]	[0.012]	[0.011]	[0.009]
TVET	-0.001	0.000	0.002	0.002	0.008
	[0.012]	[0.012]	[0.011]	[0.011]	[0.009]
Experience	0.027***	0.029***	0.031***	0.032***	0.024***
	[0.010]	[0.010]	[0.010]	[0.009]	[0.008]
2013 cohort	-0.000	-0.000	0.000	0.000	-0.000
	[0.005]	[0.005]	[0.005]	[0.005]	[0.006]
Attractive	0.017*	0.017*	0.022**	0.021**	0.020***
	[0.010]	[0.010]	[0.009]	[0.009]	[0.007]
R-squared	0.008	0.044	0.146	0.215	0.790
Job category FE	No	Yes	Yes	Yes	No
Posting characteristics	No	No	Yes	Yes	No
Job source FE	No	No	Yes	Yes	No
Officer & Day FE	No	No	No	Yes	No
Posting FE	No	No	No	No	Yes

Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016. 1,634 (22.8%) of submissions received a callback. All specifications include binary indicators for whether the post is open to women only or men only. Posting characteristics include controls for minimum/maximum age requirements, required and desired experience, desired education, required skills, accepted application methods, and an indicator for missing posting characteristics. Standard errors clustered at the job-posting level reported in brackets.

**** $p<0.01$, ** $p<0.05$, * $p<0.10$*

Table 3. Effects of Resume Characteristics on Callback Rates, by Posting Type

		Occupation Type						Gender Requirement - Open to:		
	All	Service/ Admin	Laborer	Skilled Trade/Driver	Call Center	Blue Collar	White Collar	Both Genders	Women Only	Men Only
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Female	-0.006	-0.001	-0.100**	-0.010	-0.015	-0.064*	0.001	-0.007		
	[0.011]	[0.014]	[0.049]	[0.034]	[0.020]	[0.036]	[0.012]	[0.011]		
Some college	0.004	-0.004	0.030	0.006	-0.022	0.012	-0.006	-0.009	0.016	0.010
	[0.009]	[0.015]	[0.027]	[0.013]	[0.022]	[0.013]	[0.012]	[0.015]	[0.029]	[0.012]
TVET	0.008	-0.010	0.022	0.019	0.013	0.021*	-0.005	-0.019	0.017	0.023**
	[0.009]	[0.016]	[0.024]	[0.012]	[0.042]	[0.012]	[0.013]	[0.015]	[0.031]	[0.011]
Experience	0.024***	0.031**	0.011	0.020*	-0.002	0.022**	0.024**	0.026**	0.050*	0.018*
	[0.008]	[0.013]	[0.020]	[0.011]	[0.016]	[0.011]	[0.010]	[0.012]	[0.027]	[0.010]
2013 cohort	-0.000	0.007	-0.012	-0.001	0.011	-0.004	0.006	0.010	-0.005	-0.003
	[0.006]	[0.010]	[0.016]	[0.009]	[0.019]	[0.009]	[0.009]	[0.010]	[0.023]	[0.008]
Attractive	0.020***	0.053***	-0.011	0.007	-0.003	0.001	0.042***	0.041***	0.055*	0.004
	[0.007]	[0.013]	[0.018]	[0.010]	[0.027]	[0.009]	[0.011]	[0.012]	[0.029]	[0.009]
Resumes submitted	7,172	2,636	1,048	3,068	336	3,736	3,436	2,588	636	3,948
R-squared	0.790	0.767	0.788	0.775	0.918	0.766	0.812	0.815	0.786	0.770
Callback rate	0.228	0.217	0.260	0.186	0.580	0.205	0.252	0.262	0.275	0.198
Posting FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016. Examples of occupations in service / admin include service crew and sales associates, in laborer include delivery driver and messenger, and in skilled trades include driver and service technician. Blue collar and white collar occupations are calculated based on ISCO-08 one-digit codes. Examples of blue collar occupations include driver, service technician, and kitchen helper. Examples of white collar occupations include service crew, promodiser, and customer service representative (call-center worker). Standard errors clustered at the job-posting level reported in brackets.

Table 4. Effects of Resume Characteristics on Callback Rates for Ten Most Common Occupations

	Driver	Sales	Technician	Food Service	Reception/ Admin	Cook/ Food Prep	Call Center	Delivery	Promodiser	Electrician
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Female	-0.048**	0.018	0.058	0.008	-0.001	-0.052*	-0.015	0.005	0.044	
	[0.024]	[0.032]	[0.061]	[0.027]	[0.019]	[0.031]	[0.020]	[0.044]	[0.042]	
Some college	-0.002	-0.017	0.022	0.002	-0.021	0.023	-0.022	0.066	0.042	-0.000
	[0.020]	[0.033]	[0.020]	[0.032]	[0.018]	[0.048]	[0.022]	[0.051]	[0.056]	[0.036]
TVET	0.033*	-0.014	0.025	0.022	-0.001	-0.028	0.013	0.113**	-0.023	0.025
	[0.018]	[0.036]	[0.022]	[0.032]	[0.023]	[0.033]	[0.042]	[0.056]	[0.063]	[0.026]
Experience	0.038**	0.033	-0.002	0.059**	-0.018	0.046	-0.002	0.013	0.078*	-0.017
	[0.018]	[0.031]	[0.015]	[0.028]	[0.014]	[0.039]	[0.016]	[0.043]	[0.046]	[0.040]
2013 cohort	-0.003	-0.007	-0.015	-0.005	0.023	0.026	0.011	-0.028	0.013	-0.027
	[0.014]	[0.021]	[0.015]	[0.024]	[0.015]	[0.025]	[0.019]	[0.036]	[0.048]	[0.024]
Attractive	0.014	0.063**	-0.007	0.098***	0.034*	0.054	-0.003	-0.002	0.046	0.000
	[0.016]	[0.027]	[0.010]	[0.030]	[0.018]	[0.034]	[0.027]	[0.033]	[0.047]	[0.026]
Resumes submitted	1,552	712	576	576	480	340	336	280	264	212
R-squared	0.756	0.771	0.829	0.742	0.926	0.622	0.918	0.762	0.696	0.788
Callback rate	0.208	0.282	0.0938	0.226	0.208	0.112	0.580	0.300	0.216	0.118
Posting FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Sample includes only job-postings for top ten most common occupations, representing 74% of all postings. Standard errors clustered at the job-posting level reported in brackets.

**** p<0.01, ** p<0.05, * p<0.10.*

Table 5: Effects of Resume Characteristics, by Skill and Wage Level

	Skill Level			Wages	
	Low	Medium	High	Low	High
	(1)	(2)	(3)	(4)	(5)
Female	-0.119***	0.000	0.018	-0.011	0.016
	[0.042]	[0.012]	[0.038]	[0.013]	[0.023]
Some college	0.029	0.005	-0.025	0.004	0.002
	[0.035]	[0.010]	[0.029]	[0.013]	[0.013]
TVET	-0.009	0.013	-0.014	-0.001	0.017
	[0.030]	[0.009]	[0.039]	[0.013]	[0.012]
Experience	0.005	0.026***	0.007	0.015	0.032***
	[0.028]	[0.008]	[0.025]	[0.010]	[0.011]
2013 cohort	-0.004	-0.001	0.021	0.003	-0.008
	[0.021]	[0.007]	[0.025]	[0.008]	[0.009]
Attractive	0.000	0.019**	0.050**	0.018*	0.026**
	[0.023]	[0.008]	[0.025]	[0.010]	[0.010]
Resumes submitted	644	5,976	552	3,716	3,216
R-squared	0.774	0.794	0.777	0.811	0.762
Callback rate	0.230	0.230	0.207	0.259	0.191
Posting FE	Yes	Yes	Yes	Yes	Yes

Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016. Skill level and average wages of occupations defined as described in the text. Examples of low-skill occupations include kitchen helper, messenger, and maid, medium-skill occupations include driver, service crew, and service technician, and high-skill occupations include graphic artist and massage therapist. Examples of low-wage occupations include promodisers/sales associates and messengers , and high-wage occupations include drivers and waiters. Standard errors clustered at the job-posting level reported in brackets.

**** $p<0.01$, ** $p<0.05$, * $p<0.10$.*

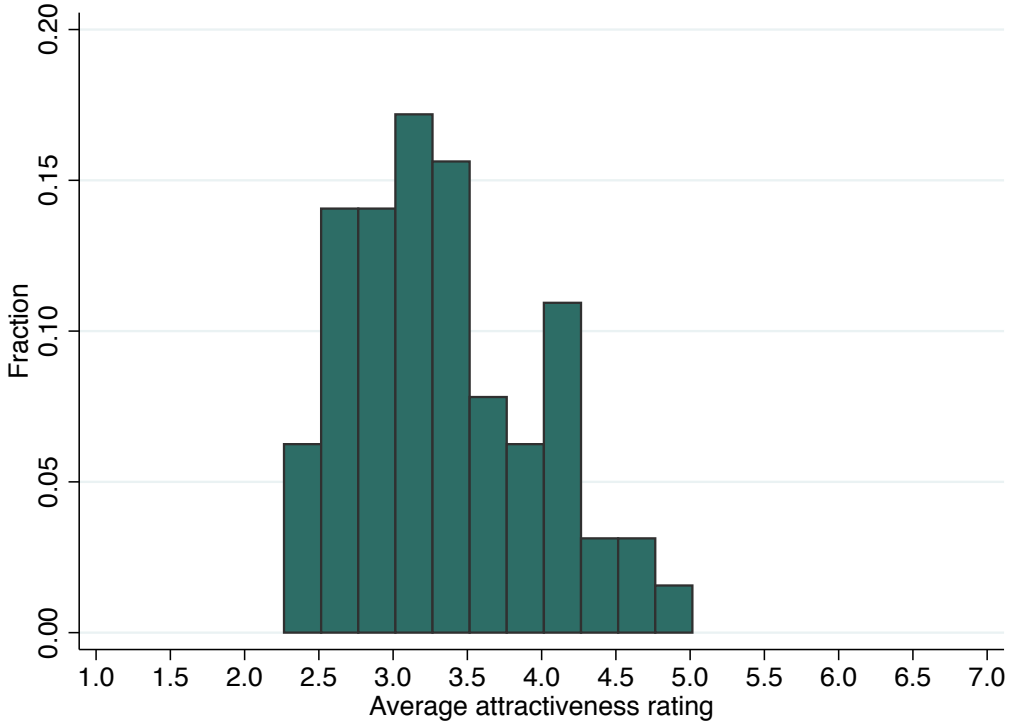
Table 6. Effects of Resume Characteristic Interactions on Callback Rates

	(1)	(2)	(3)	(4)
Female	-0.005	0.001	-0.011	-0.014
	[0.012]	[0.012]	[0.015]	[0.013]
Some college	0.023	0.004	0.011	0.008
	[0.016]	[0.009]	[0.014]	[0.012]
TVET	0.008	-0.006	0.004	-0.003
	[0.009]	[0.015]	[0.014]	[0.012]
Experience	0.027***	0.020**	0.018	0.019*
	[0.009]	[0.009]	[0.016]	[0.011]
2013 cohort	0.000	0.000	0.000	0.001
	[0.006]	[0.006]	[0.006]	[0.006]
Attractive	0.026***	0.012	0.014	0.006
	[0.009]	[0.009]	[0.011]	[0.015]
Interactions				
Some college X Female	-0.003			
	[0.017]			
Some college X Experience	-0.013		-0.010	
	[0.015]		[0.018]	
Some college X Attractiveness	-0.019			-0.009
	[0.015]			[0.016]
TVET X Female		-0.021		
		[0.016]		
TVET X Experience		0.011	0.006	
		[0.016]	[0.018]	
TVET X Attractiveness		0.024*		0.021
		[0.015]		[0.016]
Experience X Female			0.008	
			[0.016]	
Experience X Attractiveness			0.008	0.008
			[0.015]	[0.015]
Attractiveness X Female				0.017
				[0.016]
R-squared	0.790	0.790	0.790	0.790
F-test, interaction terms jointly zero				
F-statistic	0.841	1.742	0.326	1.139
P-value	0.471	0.156	0.860	0.336
Posting FE	Yes	Yes	Yes	Yes

Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016. Standard errors clustered at the job-posting level reported in brackets.

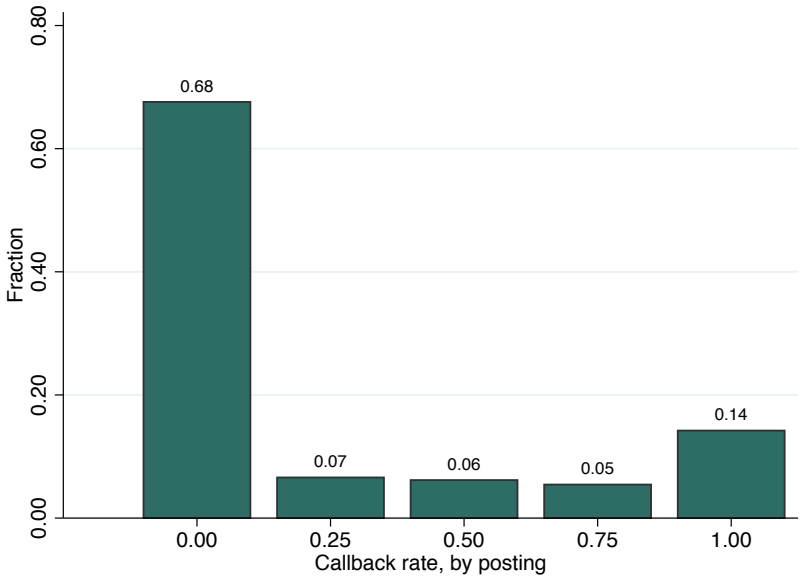
**** p<0.01, ** p<0.05, * p<0.10*

Figure 1. Distribution of Average Attractiveness Rating for Resume Photographs



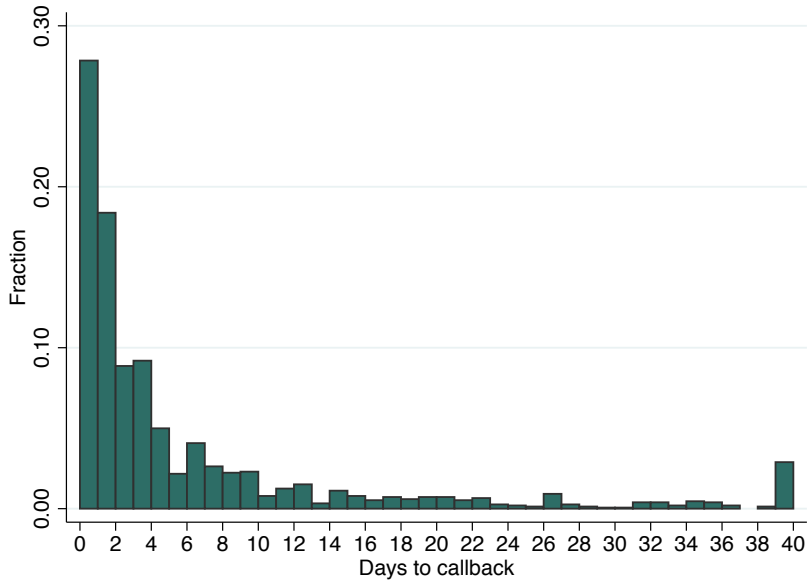
Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016. Average photograph attractiveness based on ratings of 1 (low) to 7 (high) by 50 Filipino evaluators recruited through Upwork. The median across photographs of the average ratings were 3.34 overall; 3.40 for women, 3.27 for men.

Figure 2. Callback Rate, by Job-Posting



Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016.

Figure 3. Days to Callback, Conditional on Callback



Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016.

Appendix Table 1. Example TVET Certifications for 15 Most Common Job-Postings

Occupation	TVET Certification 1	TVET Certification 2	TVET Certification 3	TVET Certification 4
Driver	Driving Rush Course	Defensive Driving	Driving Lessons	Beginner's Course
Saleslady/Salesman/Salesclerk	Entrepreneurship NC II	Entrepreneurship Technology	Online Web Marketing Training Program	Entrepreneurship Specialist Course
Service Crew/Waiter/Waitress	Food and Services	Certificate in Food and Beverage	Food and Beverages Services	Certificate in Food and Beverage Services
Receptionist/Admin	Certificate in Office Administration, Computer Secretarial Course	Associate in Office Executive Assistantship	Associate in Accounting Technology	Front Office Services
Technician	Electrical Installation and Maintenance	Building Wiring Installation NC II	Certificate in Automotive Servicing	RAC NC II
Cook/Food Prep	Certificate in Cookery	Certificate in Commercial Cooking	Certificate in Food and Beverage Services	Certificate in Culinary Arts
Call Center	Certificate in Contact Center Services	Certificate in Contact Center Services	Certificate in Contact Center Service	Entrepreneurship Technology
Delivery	Beginner's Course	Driving Lessons	Driving Rush Course	Defensive Driving
Promodiser	Entrepreneurship Technology	Entrepreneurship Specialist Course	Online Web Marketing Training Program	Entrepreneurship NC II
Stock/Inventory Clerk	Entrepreneurship Specialist Course	Online Web Marketing Training Program	Entrepreneurship Technology	Entrepreneurship NC II
Electrician	Electrical Installation and Maintenance	Reinforced Steel Bar Installation NC II	Building Wiring Installation NC II	Electrical Technician
Factory/Machine Operator	Entrepreneurship NC II	Entrepreneurship Specialist Course	Entrepreneurship Technology	Online Web Marketing Training Program
Housekeeping	Housekeeping NC II	Household Services	Housekeeping NC III	Certificate in Housekeeping
Merchandiser	Online Web Marketing Training Program	Entrepreneurship NC II	Entrepreneurship Technology	Entrepreneurship Specialist Course
Messenger	Defensive Driving	Driving Lessons	Beginner's Course	Driving Rush Course

Notes: Table shows examples of the potential TVET certifications included on our resumes submitted with a TVET certification for the 15 most commonly occuring job-posting occupations. TVET qualifications were drawn from a pool of eight choices specific to each job type. Duplicates in this table reflect similar TVET courses and/or certifications obtained from different schools.

Appendix Table 2: Distribution of Job-Posting Sources

	Frequency	Relative Frequency	Cumulative Frequency
jobstreet.com.ph	686	38.3%	38.3%
indeed.com.ph	374	20.9%	59.1%
Manila Bulletin (print)	304	17.0%	76.1%
Facebook	178	9.9%	86.0%
Online, other	137	7.6%	93.6%
jobsdb.com.ph	36	2.0%	95.6%
Bulgar (print)	28	1.6%	97.2%
Print, other	23	1.3%	98.5%
Phil-Job.Net	16	0.9%	99.4%
Philippine Star (print)	11	0.6%	100.0%
Total, online	1427	79.6%	
Total, newspaper/print	366	20.4%	
Total	1793	100.0%	

Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016.

Appendix Table 3. Distribution of Job-Posting Occupations

Type of Position	Frequency	Relative Frequency	Cumulative Frequency
Driver	388	21.6%	21.6%
Saleslady/Salesman/Salesclerk	178	9.9%	31.5%
Technician	146	8.1%	39.6%
Service Crew/Waiter/Waitress	145	8.1%	47.7%
Receptionist/Admin	122	6.8%	54.5%
Cook/Food Prep	85	4.7%	59.2%
Call Center	84	4.7%	63.9%
Delivery	70	3.9%	67.8%
Promodiser	66	3.7%	71.5%
Electrician	54	3.0%	74.5%
Stock/Inventory Clerk	49	2.7%	77.2%
Factory/Machine Operator	45	2.5%	79.7%
Housekeeping	40	2.2%	82.0%
Merchandiser	38	2.1%	84.1%
Messenger	37	2.1%	86.1%
Laborer/Attendant	27	1.5%	87.6%
Massage Therapist	24	1.3%	89.0%
Mechanic	23	1.3%	90.3%
Artist, Misc.	23	1.3%	91.5%
Skilled Trade, Other	19	1.1%	92.6%
Beautician	15	0.8%	93.4%
Caregiver	13	0.7%	94.2%
Carpenter	12	0.7%	94.8%
It/Computer	12	0.7%	95.5%
Plumber	12	0.7%	96.2%
Welder	11	0.6%	96.8%
Security Guard	8	0.4%	97.2%
Truck Helper	7	0.4%	97.6%
Mason	5	0.3%	97.9%
Other	38	2.1%	100.0%

Notes: Sample includes 7,172 resumes submitted to 1,793 job-postings between October 2015 and March 2016.

Appendix Table 4. Job-Posting Characteristics, by Number of Callbacks

	All	0 or 4 Callbacks	1, 2, or 3 Callbacks
	(1)	(2)	(3)
Number of postings	1793	1471	322
Number of applications	7172	5884	1288
Number of callbacks	1634	1012	622
Callback rate	22.8%	17.2%	48.3%
Occupation Type			
Service/admin	36.8%	36.2%	39.4%
Laborer	14.6%	14.2%	16.5%
Skilled trades	42.8%	43.4%	39.8%
Call center	4.7%	5.2%	2.5%
Other	1.2%	1.0%	1.9%
Blue collar	52.1%	51.6%	54.3%
White collar	47.9%	48.4%	45.7%
Gender Requirement			
Both genders	36.1%	36.4%	34.8%
Men only	55.1%	55.1%	55.0%
Women only	8.9%	8.6%	10.3%
Skill Level			
Low	9.0%	8.6%	10.6%
Medium	83.3%	83.6%	82.0%
High	7.7%	7.7%	7.5%
Wage Level			
Low	53.6%	53.8%	52.9%
High	46.4%	46.2%	47.1%
Application method			
Upload CV	27.5%	27.9%	26.1%
E-mail	72.6%	72.1%	74.0%
Job source			
Online	79.6%	79.5%	80.1%
Newspaper	20.4%	20.5%	19.9%
Mean days to callback	6.7	5.4	8.9
Callback Received Via:			
Text	76.6%	77.4%	75.5%
Phone call	24.7%	24.1%	25.6%
E-mail	22.0%	26.1%	15.8%

Appendix Figure 1: Sample Resume for Kitchen Staff Position – Resume Includes One Year Work Experience and Two Years College

KIMBERLY NICOLAS VILLANUEVA
4 S. Castillo St. Brgy. San Pedro, Pateros
Contact Number: 0949 - 174 - 7961
E-mail Address: kimberlybvillanueva@gmail.com

Applicant Photo

Personal Information:

Gender: Female
Birth Date: February 23, 1998
Height: 5'2"
Weight: 45kg

Educational Background:

2013 — **High School Diploma**
Pateros National High School
P. Herrera, San Pedro, Pateros City

2015 — **Completed 2nd Year (BS Hotel & Restaurant Management)**
Access Computer College
Anonas Cubao, Quezon city

Work Experiences:

Waitress — **Ignacio's Catering Services**
October 2014 - Present

Seminars Attended:

5S of Good Housekeeping Seminar
Philippine Trade Training Center

Food Safety (A Basic Training on HACCP)
Business Coach Inc.

Special Skills:
1. Able to write clearly and effectively
2. Ability to clean floor area of any spillage of water, detergent and food per safety and sanitation guidelines
3. Ability to disassemble, inspect, clean, perform maintenance on and and reassemble equipment properly

References:

Eduardo P. Ilustrisimo
Supervisor
Ignacio's Catering Services
Contact Number: 0923 - 177 - 8487

Patricia G. Espeleta
High School Teacher
Pateros National High School
Contact Number: 0997 - 211 - 1380

Jocelyn I. Llena
Barangay Kagawad
Barangay San Pedro
Contact Number: 0923 - 496 - 8132

Appendix Figure 2: Sample Resume for Driver Position – Resume Includes No Work Experience nor Postsecondary Education

Applicant Photo

ANGELO SANCHEZ MENDOZA
369 Gov. Santiago St. Brgy. Malinta, Valenzuela City
Contact Number: *0923 - 496 - 8207*
E-mail Address: *angelom7899@yahoo.com*

Personal Information:

Gender: Male
Height: 5'4"
Birth Date: December 28, 1997
Weight: 63kg

Educational Background:

High School
Malinta National High School
High School Diploma
St. Jude Subdivision, Valenzuela City
2013

Seminars Attended:

Defensive Driving Seminar
Quickdrive Driving School

Personality enhancement Skills
ARIVA Center

Special Skills:

1. Ability to verify and complete required documentation and reports
2. Time management skills
3. Able to write clearly and effectively

References:

Patricia G. Espeleta
High School Teacher
Malinta National High School
Contact Number: *0997 - 211 - 1380*

Marie D. Torres
High School Teacher
Malinta National High School
Contact Number: *0977 - 644 - 1504*

Maritess F. Mendoza
Barangay Kagawad
Barangay Malinta
Contact Number: *0977 - 644 - 1511*