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JOBS
WORKING
PAPER
Issue No. 11

# Youth Labor Skill Training in Nepal

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WORLD BANK GROUP
Jobs

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# Youth Labor Skill Training in Nepal

Dhushyanth Raju

Training is one of the main ways that the Nepal government intervenes in the labor market. This descriptive study documents patterns, trends, correlates, and the labor-market effects of formal off-the-job training of youth, based on national household survey data. Training rates in Nepal tend to be higher than in other South Asian countries. Within the country, rates are higher for traditionally advantaged groups. While both short- and long-term training programs are available, most programs are short-term. Training is associated with a higher likelihood of employment, wage work, and nonfarm work for women but not for men. Training does not appear to be associated with wage earnings for either gender. Interest in training runs high, especially among traditionally disadvantaged groups, and among those who are currently employed or have previously obtained training. Little rigorous evidence is available for Nepal to inform the extent and nature of public intervention in the training market. The study concludes by offering suggestions for future, policy-relevant research.

*JEL codes*: J08, J24, O15
*Keywords*: Nepal, youth, labor skill training

World Bank, Washington, D.C., draju2@worldbank.org. Helpful comments and guidance were received from Scott Abrahams, Usha Bhandari, Laurent Bossavie, Sudyumna Dahal, Anastasiya Denisova, Pablo Gottret, Johannes Koettl, Gladys Lopez-Acevedo, David Newhouse, Quynh Nguyen, Jyoti Pandey, Jasmine Rajbhandary, Iffath Sharif, Pradeep Singh, Thomas Walker, and participants at meetings and workshops in Nepal. The paper was prepared for the World Bank Advisory Services and Analytics activity *Understanding the Labor Market Decisions and Outcomes of Nepal's Young Adults* (P156694).

## I. Introduction

One of the main ways that the Nepal government intervenes in the labor market is by training workers.[1] The country's preference for training supply is reportedly motivated by at least three reasons. First, training is seen as appropriate given the relatively low level of human capital acquisition in Nepal. As one measure, the average education attainment among individuals aged 16–34 in 2010–11 was eight years. Second, training has attributes that make it attractive from both technical and political angles: It is visible, tangible, seemingly straightforward to design and administer, and relatively uncontentious (for example, in contrast to welfare programs). Third, aid agencies have driven the development of the country's training system and the expansion of training supply by providing funds and technical assistance (ADB 2004; World Bank 2011; ADB 2013a; World Bank 2017). As a result, training has increased substantially in Nepal since its emergence over four decades ago, and is now extensive.

While training comprises an important intervention in Nepal's labor and development space, little systematic empirical research exists on training in the country, such as on the drivers and barriers to training demand and supply, and the labor market effects of training. The existing literature on the topic is mainly composed of basic descriptions of the structure and status of the training system, as presented in project documents of international aid agencies (see, for example, World Bank 2011; ADB 2013a, 2013b; World Bank 2017), or of statistical profiles of training providers and recipients based on administrative data in government reports (see, for example, GON 2010).

In this study, we conduct a descriptive analysis of mainly formal, off-the-job training among youth. Youth is defined as individuals aged 16–34. This definition is a compromise between Nepal's official definition of youth (aged 16–40) and the international definition of "extended youth" (aged 15–34). Formal off-the-job training is defined as training through short-term training courses, or through vocational education tracks that confer a Technical School Leaving Certificate (TSLC) or a technical diploma.

We investigate several questions:

(1) What is the incidence (or rate) of training in Nepal, and how does it compare to rates in other countries in South Asia?

[1] The other two main ways are extensive public sector employment and the provision of permits to Nepalis for short-term, contract labor migration to countries with which Nepal has bilateral labor agreements.

(2) How do training rates differ by worker gender, age, schooling status, and education attainment?

(3) How do training rates differ spatially, that is, between urban and rural areas, and among major regions in Nepal?

(4) What types of training do recipients obtain?

(5) How do training recipients differ from nonrecipients?

(6) Is training associated with employment and earnings outcomes?

(7) What are the levels, patterns, and correlates of interest in training?

To answer these questions, we use data from the 2008 Nepal Labour Force Survey (NLFS) and the 2013 Nepal School-to-Work Transition Survey (SWTS). Both household sample surveys are representative for Nepal and its six major regions. The NLFS is the latest-available survey with data on whether the individual obtained any formal off-the-job training. It has a large sample size and data on a number of potentially relevant individual and household covariates. In comparison, the SWTS, to its advantage, gathered data on whether employed workers obtained on-the-job training. However, it only gathered data on whether the individual obtained off-the-job training through TSLC/technical diploma programs; it has a small sample size; and it has data on a small number of potentially relevant covariates. The SWTS also did not gather data from individuals older than age 29. Consequently, our analysis of training is mostly based on NLFS data.

In 2008, 10% of youth had obtained formal off-the-job training at some point. In 2013, a total of 6% of individuals aged 16–29 obtained training through TSLC/technical diploma programs at some point, a substantial increase from 1.3% in 2008. In addition, in 2013, 10% of individuals aged 16–29 obtained on-the-job training over the preceding year.

Training rates are higher for youth than nonyouth (aged 35–54), for urban residents than rural ones, and for individuals who have obtained at least a School Leaving Certificate (SLC). (The certificate is given to those who pass a national exam at the end of grade 10.) Gender differences in training rates are small, whereas differences between regions in Nepal are large. Training rates for Nepal tend to be higher than for Bangladesh, India, or Pakistan.

The most popular fields for female training recipients are basic computing and dressmaking/tailoring, while basic computing ranks as most popular for male recipients. Short-

term training predominates. The median length of training is three months for rural recipients and six months for urban ones.

Training recipients are on average older, more educated, and are more likely to be attending school. They tend to come from wealthier households, and from traditionally advantaged ethnic or caste communities in the country such as Brahmin/Chhetri or Newar. Urban training recipients are also less likely to come from the Terai and more likely to come from Kathmandu Valley and the Hills. Those who obtained training in basic computing appear to be more advantaged in terms of education, wealth, and caste or ethnic affiliation than those who obtained training in other fields.

We examine the effects of training on various employment margins and wage earnings, adjusting for the individual's selection into training based essentially on multiple regression fitted to cross-sectional, observational data. In general, for women, training is associated with higher likelihoods of employment, wage work, and nonfarm work. Whether training effects for women are significant varies by selected sociodemographic and training subgroups, namely schooling status, education attainment, rural versus urban residence, short-term training versus TSLC/technical diploma programs, and training in basic computing versus other fields. For men, training does not appear to be associated with the examined employment margins. In addition, whether training effects are significant for men varies little by any of the examined sociodemographic and training subgroups.

In general, we do not find a training effect on wage earnings for either gender. This finding contrasts with evidence from relatively rigorous evaluations by Chakravarty et al. (2015) and Bhatta et al. (2017), who both find that selected short-term training interventions had significant positive effects on the labor earnings of socioeconomically disadvantaged groups in Nepal. We recognize that our empirical approach to identifying effects is weak. Notwithstanding, among other non-methodological explanations, we posit that the general absence of effects on wage earnings that we find indicates that skills (on their own) may not be the main binding constraint to labor market success for disadvantaged individuals. It may (additionally) be a lack of financial and physical capital to invest in income-generating activities, as suggested by evidence from some recent evaluations of training and self-employment programs in other low-income countries (Hicks et al. 2015; Blattman, Fiala, and Martinez 2014) and by SWTS data for self-employed workers in Nepal.

Interest in training is high: 40% of youth express interest in obtaining training. Interest is particularly high in areas outside of Kathmandu Valley. For those interested in training, dressmaking/tailoring and basic computing garnered the most interest among women, whereas men were most interested in basic computing. Other fields with significant interest include farming and livestock management and hairdressing/beautician services for women; and farming and livestock management, manufacturing and repair, and driving for men. In contrast to patterns for those who received training, interest in training is higher among younger and less wealthy individuals. Interest in training is also higher among those who have already obtained training, and by those already employed. Those already trained tend to be interested in training in the same field, which may signal demand for upskilling. Unemployed workers tend to view their education as relevant but inadequate, and view higher education and training through TSLC/technical diploma programs, training in computing, and on-the-job apprenticeships as useful for obtaining work.

The remaining sections of the paper are organized as follows: Section II presents background information on the formal, off-the-job training system in Nepal. Section III discusses the data and samples for the analysis. Sections IV, V, and VI respectively present results on: the levels, patterns, and correlates of training; the effects of training on labor market outcomes; and the levels, patterns, and correlates of interest in training, as well as on worker perceptions of training in relation to employment. Section VII concludes by discussing the implications of our findings for training research and policy, with respect to effectiveness, efficiency, and equity.

## II. Nepal's training system

Nepal has offered formal training programs for workers for more than four decades. Tribhuvan University, the country's first university, has provided training in engineering, agriculture, livestock, forestry, and medicine since the late 1960s. The first independent technical institute was established in 1980 (ADB 2015).

The Nepal government has passed a number of major policies on training over the years. These include the Council for Technical Education and Vocational Training (CTEVT) Act of 1989 (amended in 1993), the National Technical and Vocational Education and Training Sectoral Policy of 1999, the Technical Education and Vocational Training and Skills Development Policy of 2007, and the Nepal Technical and Vocational Education and Training Policy of 2012. As a

primary goal, all these policies call for a major expansion in training supply. Other government policies, plans, and documents such as the National Planning Commission's periodic development plans and the Ministry of Youth and Sports' National Youth Policy of 2015 and Youth Vision 2025 also call for expanding training supply and see training as a critical instrument for improving the country's economy (ADB 2015; GON 2015a, 2015b, 2017; World Bank 2017).

In a pivotal move, the government in 1989 established the Council for Technical Education and Vocational Training (CTEVT) to formulate policies and plans, and coordinate, supply, and assure the quality of training. CTEVT has its own technical institutes, and it also accredits private technical institutes (ADB 2015).

Nepali workers have three main training options: (1) programs that confer a Technical School Leaving Certificate (TSLC); (2) programs that confer a technical diploma, and (3) short-term training courses or events that confer a training completion certificate. CTEVT and private technical institutes offer TSLC/technical diploma programs. A few community secondary schools also offer TSLC programs, which are managed by CTVET.

Short-term training courses are offered by various providers, including CTEVT and private technical institutes, departments under different government ministries, industry associations, nongovernmental organizations, and civil society organizations (World Bank 2011; ADB 2015; World Bank 2017). Government entities that offer short-term training courses include:

(1) Directorates of Agricultural Training and Animal Health under the Ministry of Agricultural Development;
(2) Nepal Academy of Science and Technology;
(3) Nepal Academy of Tourism and Hotel Management under the Ministry of Culture, Tourism, and Civil Aviation;
(4) Local Development Training Academy under the Ministry of Federal Affairs and Local Development;
(5) Youth and Small Entrepreneur Self Employment Fund under the Ministry of Finance;
(6) Department of Cottage and Small Industries and the Cottage and Small Industry Development Committee under the Ministry of Industry;

(7) Vocational Skills Development Training Directorate under the Ministry of Labor and Employment;
(8) Ministry of Peace and Reconstruction;
(9) Mechanical Training Center under the Department of Roads, Ministry of Physical Infrastructure and Transport;
(10) Cottage and Small Industry Development Board; and
(11) Industrial Enterprise Development Institute.

For entry into TSLC programs, individuals must have completed grade 10 or passed the School Leaving Certificate (SLC) exam, which is a national academic exam that students take at the end of grade 10. For grade 10 completers, programs are 29 months long, whereas for SLC holders, the programs are either 15 or 18 months long. For entry into technical diploma programs, individuals must have obtained the SLC. These programs are typically three years long. The main TSLC/technical diploma programs are in the fields of agriculture, engineering, and health (World Bank 2011; ADB 2015; World Bank 2017).

For entry into short-term training courses, individuals must be at least age 16. Other than that, entry qualifications differ greatly. Some training courses do not require any academic qualifications, while some others require completing grade 8 or certification in lower-level training (World Bank 2017). Short-term training courses typically range in length from a few days to 10 months (ADB 2015).

Irrespective of how their skills were acquired, individuals can choose to get certified by taking occupational skill tests administered by the National Skills Testing Board (NSTB) under CTEVT.

Training has expanded substantially over time (ADB 2004; World Bank 2011; ADB 2013a, 2013b; ADB 2015; World Bank 2017). In 2009–10, some 25,000 individuals participated in TSLC/technical diploma programs, and another 60,000 individuals participated in short-term training courses. In comparison, in the early 2000s, the estimated annual enrollment capacity in all training programs and courses was 50,000. Between 2000 and 2010, the number of short-term training courses grew from 45 to more than 225. The number of private technical institutes increased from less than a handful in 1990 to more than 100 in 2000, and to more than 400 in 2010. Individuals tested and certified by NSTB increased almost tenfold over the late 2000s.

Much of the country's developments and activities in the training space have been driven by significant, sustained financial and technical support from international aid agencies, mainly the Asian Development Bank (ADB), the Swiss Agency for Development and Cooperation (SDC), and the World Bank, starting as far back as the early 1990s (ADB 2015; World Bank 2017).

Nepal's training system is perceived to perform poorly. Project documents by aid agencies report that training is marked by insufficient and inequitable access, poor quality, and low market relevance. These issues are viewed to be linked to poor capacity to deliver training. As suggestive evidence of issues with training quality and relevance, a 2012 labor demand survey of a sample of employers in construction, service, and manufacturing subsectors found that only about one-half of employers viewed TSLC/technical diploma holders as adequately prepared (ADB 2013a). What's more, the issues with training appear to be chronic (for example, compare the description of the issues in ADB 2004 to ADB 2013b).

Initiatives have been introduced at different levels aimed at improving the supply of training. They have included:

(1) offering training to administrators, instructors, and assessors;
(2) developing course curricular;
(3) constructing or rehabilitating facilities;
(4) purchasing machinery, equipment, and materials for courses;
(5) conducting rapid labor demand assessments;
(6) hiring training providers through a competitive bidding process;
(7) contracting providers to offer training on vocational and life skills, post-training services such as job counseling and placement services, and training in hard-to-reach villages through a community-based model; and
(8) paying providers for their services partly conditional on training-recipient employment and minimum earning requirements (World Bank 2011; ADB 2013a, 2013b; World Bank 2017).

Initiatives have also been introduced to encourage demand for training. They have included:

(1) providing free or subsidized training; and

(2) providing stipends, scholarships, and transportation benefits conditional on minimum attendance and learning requirements.

Traditionally disadvantaged groups such as women, the poor, or members from the Dalit community receive preferential treatment (benefit from affirmative action) in terms of admission into training programs and eligibility for training program benefits (World Bank 2011; ADB 2013a, 2013b; World Bank 2017).

## III. Data

Our main data source is the 2008 Nepal Labour Force Survey (NLFS).[2] The NLFS is representative at the national level, as well as for six regions within the country (Kathmandu Valley, urban Hills, urban Terai, rural Hills, rural Terai, and Mountains). The original sample was 16,000 households from 800 wards, the primary sampling units (PSUs). Out of this sample, 15,976 households from 799 PSUs were successfully interviewed. See GON (2009) for survey design details.

With respect to training, the NLFS asked questions on whether the individual obtained any formal off-the-job training, either through short-term training courses or TSLC/technical diploma programs, as well as what field the training was in and how long it took. The survey also asked whether the individual was interested in training and, if yes, what specific field he or she was interested in. All the training questions are separate questions in the education module, and they were asked to individuals aged 14 and above.

The NLFS is the latest-available survey with data on total, formal off-the-job training. The survey also has other advantages, such as its large sample size and its data on a number of potentially relevant individual and household covariates.

Our secondary data source is the 2013 Nepal School-to-Work Transition Survey (SWTS).[3] This survey is representative at the national level, and for the same six regions as the NLFS. The original survey sample was 3,020 households from 151 wards (PSUs). In these households, only individuals aged 15–29 were interviewed. The survey successfully interviewed

[2] The NLFS was designed and administered by the Central Bureau of Statistics, Government of Nepal, with support from the International Labour Organization (ILO).

[3] The SWTS was administered by the Center for Economic Development and Administration (CEDA), with technical and financial support from the ILO and the Mastercard Foundation.

3,584 individuals from 2,652 households.[4] See Serriere and CEDA (2014) for survey design details.

With respect to training, in the SWTS, technical education at the secondary and post-secondary levels—i.e., TSLC/technical diploma programs—were included as response options to questions on the current level of education for those attending school or the highest level of education for those who have completed their schooling. The SWTS also asked questions about on-the-job training in the last year to employed workers (39% of individuals), and views on the value of education and training to unemployed workers (9% of individuals).[5] However, our analysis using the SWTS data is limited due the survey's small sample size and less extensive data on potentially relevant individual and household covariates.

As an important caveat, both the NLFS and SWTS only gathered training data from individuals residing in the household at the time of the respective survey. Nepal has experienced substantial labor migration, mostly by young men, to other countries and regions, such as India, Malaysia, and the Middle East. Eighteen percent of Nepali young men (and 1% of young women) were absent from their households and employed in other countries based on the 2010–11 Nepal Living Standards Survey. Reflecting this, the estimated sex ratio for individuals aged 15–34 based on 2011 National Population Census data is 85 men per 100 women (NOP 2012). Young men who are present in households systematically differ in characteristics from young men who are absent. Thus, our analysis of training for young men who are present may be biased relative to all young Nepalese men.

## IV. Patterns and correlates of training

### A. *Training rates*

The 2013 SWTS data show that 6% of individuals aged 16–29 obtained training through TSLC/technical diploma programs. The rates of such training are comparable between urban and rural residents. Using data on training length in the 2008 NLFS, we indirectly estimate the share of individuals aged 16–29 who obtained training through TSLC/technical diploma programs to be 1.3%. Thus, it appears that the rate of training through these tracks has increased

[4] CEDA communicated that the gap between the original and actual household sample sizes was due to the absence of any individuals in the selected age range in some households.

[5] Employed is defined as engaged in an economic activity for at least one hour in the last week. Unemployed is defined as not employed, available to work in the last week, and having actively searched for work in the last month.

approximately fourfold over the five-year period from 2008 to 2013. The large increase is consistent with the increase in training enrollment (capacity) presented in Section II.

SWTS data also show that 10% of employed workers aged 16–29 report that they received on-the-job training in the last year. Another 5% of employed workers report that they obtained off-the-job training, mainly in vocational trades, basic computing, and basic business and accounting. The on-the-job training rate for employed workers is higher in rural than urban areas (11% versus 7%). On-the-job training rates appear to be similar between wage and self-employed workers.

Based on NLFS data, we find that 10% of youth (aged 16–34) obtained formal off-the-job training. In the rest of this section, we examine training patterns using these data.

B. *Patterns in training rates*

Figure 1 shows training rates, separately for youth and nonyouth (aged 35–54) age cohorts. For Nepal, the training rate is 10% for youth, and 6% for nonyouth. Training rates range from 6% for rural women to 21% for urban men among youth, whereas among nonyouth, they range from 3% for rural women to 13% for urban men.

Multiple factors may explain the difference in training rates between youth and nonyouth. On the supply side, training supply has increased over time. Thus, the current youth enjoy a higher supply than the nonyouth when they were younger. Training supply also often by design targets youth. On the demand side, those who are making the transition from school to work or who are seeking greater labor market returns by shifting between work activities tend to be youth, and they are more likely to seek training than those who have stable work, who tend to be nonyouth.

Youth training rates are markedly higher in urban areas than rural ones. For example, for women, the youth training rate is 19% in urban areas and 6% in rural areas. Youth training rates are slightly lower for women than men. For example, in rural areas, the youth training rate is 6% for women and 9% for men. In the rest of the section, all statistics are for youth only.

Figure 2 compares youth training rates in Nepal to rates for three other South Asia countries: Bangladesh, India, and Pakistan. The data for India and Pakistan allow us to construct identical training indicators to that for Nepal, specifically whether or not the individual ever obtained any formal off-the-job training. The data for Bangladesh only allow us to construct a

training indicator for whether or not the individual obtained any formal off-the-job training *in the last year*. The period-limited indicator for Bangladesh would work in favor of Nepal exhibiting higher rates. In contrast, the data for India and Pakistan are more recent than for Nepal, which would work against Nepal exhibiting higher rates if training markets have expanded in all countries.

With these caveats in mind, we find that training rates for Nepal are mostly higher than for other countries. At the country level, the training rate for Nepal (10%) is slightly higher than for Bangladesh and Pakistan (8% each), and considerably higher than for India (3%). In each of the gender-by-location subgroups, the rates for Nepal are either highest or second-highest relative to the other countries. The contrast is most notable for urban women: Nepal has the highest rate at 19%, followed next by Bangladesh with a rate less than half Nepal's, at 9%.

Figure 3 shows training rates across regions in Nepal. The most striking pattern is the higher rates in urban regions than rural ones. For example, for women, training rates range from 17% to 21% in urban regions, compared to 5% to 7% in rural regions. Among urban regions, rates in the Terai are lower than in Kathmandu Valley and the Hills. For example, for women, it is 17% in the Terai compared to 21% in Kathmandu Valley and the Hills.

Figure 4 shows training–age profiles. Figure 5 shows training-schooling status (panel A) and training–education attainment profiles (panel B). We treat the profiles as reflecting the "timing" of training uptake in relation to age, schooling status, and education attainment. The profiles are imperfect, however, because information on these variables was not captured in relation to the timing of training but only as of the time of the survey.

The training–age profiles display a weak, inverted-U shape. Training rates rise with age over the late teens and early twenties before falling over the late twenties and early thirties. This pattern is more discernible in the urban profiles. Training rates are higher for those who are attending school than those who have completed their schooling. The rates range from 9% for rural women to 26% for urban men who are attending school, whereas they range from 6% for rural women to 18% for urban men who have completed their schooling. The training–education attainment profiles display a convex shape. Training rates are flat at relatively low levels, and then rise sharply when individuals have obtained the SLC.

Multiple factors may explain this pattern of change in the training–education attainment profiles. On the supply side, entry into at least TSLC/technical diploma programs requires that

the individual has completed grade 10 or obtained the SLC. On the demand side, individuals may seek training upon leaving school in order to improve their labor market prospects. The rate of school exits increases sharply upon completing grade 10, obtaining the SLC, or completing grade 12 (intermediate education).

C. *Training fields*

Which fields were the most popular among training recipients? Table 1 reports the distribution of recipients by training field.[6] In urban areas, the most common field was basic computing (38% for female recipients and 57% for male recipients), followed by dressmaking/tailoring for female recipients (30%), and other service fields (such as food service, hotel service, tourism, and security) for male recipients (10%). In rural areas, the most common field for female recipients was dressmaking/tailoring (48%), followed by basic computing (20%). As in urban areas, the most common field for male recipients in rural areas was basic computing (37%). However, the field distribution in rural areas is less skewed than in urban areas for male recipients. In rural areas, 13% of male recipients obtained training in construction, 11% in driving, 10% in small manufacturing and repair, and 9% in health care services.

Table 2 reports summary statistics for selected characteristics of recipients and their training by field. Generally consistent with traditional patterns of gender-dominated occupations, women comprised the majority of recipients of training in teaching, handicrafts, dressmaking/tailoring, and hairdressing/beautician services, whereas men made up the majority of recipients of training in construction, small manufacturing and repair, driving, and other service fields. The majority of recipients of training in basic computing were attending school at the time of the survey, whereas the majority of recipients of training in other fields had completed their schooling. Recipients of training in teaching, basic computing, and health

[6] Training fields are constructed as follows. Individual responses were coded using the 1997 ISCED fields for training. With the exception of four detailed fields (*computer science, dressmaking/tailoring, driving and motor vehicle operation, and hairdressing/beautician work*) that had reasonable numbers of observations, detailed fields were aggregated to the broad field level. Given their similarity, the broad field of *engineering* was combined with the broad field of *other craft, trade, and industrial*. Broad fields with less than 1% of observations each were eliminated. Instead of using ISCED's broad field names, we sometimes named the field based on the detailed field in it with the highest percent of observations. For example, instead of using the broad field name of *fine and applied arts*, we named it "handicrafts"; instead of using the broad field name of *agriculture, forestry, and fisheries*, we named it "farming and livestock management." Discussions with training providers indicate that the computer science observations are largely tantamount to basic computer and Internet use. Thus, we named this field "basic computing."

services are more likely to have obtained the SLC than recipients of training in other fields. These patterns generally hold for both rural and urban areas.

Short-term training, defined as training lasting less than 12 months, is the norm. With the exception of urban and rural recipients of training in health services and urban recipients of training in fine and performing arts, the vast majority of recipients across fields obtained short-term training. The median length of training was typically one or three months across fields for rural recipients, whereas it was typically three or six months across fields for urban recipients. Training was longest in health care services, with a median length of 15 months. This is consistent with the length of TSLC programs to become a Community Medical Assistant, Lab Assistant, or Auxiliary Nurse Midwife, which last either 15 or 18 months. Training was shortest in basic business and accounting, and fine and performing arts for rural recipients, and agriculture and livestock management for both rural and urban recipients, with a median length of one month or less.

D. *Characteristics of training recipients*

How do training recipients differ from nonrecipients? Table 3 reports pairwise differences in mean individual and household characteristics between nonrecipients and recipients. With respect to demographic characteristics, among urban women, recipients are less likely to be the household head or the head's spouse and more likely to the child or grandchild of the household head than nonrecipients. Recipients are on average older and are less likely to be married than nonrecipients. Among men, recipients are less likely to be born in the Village Development Committee or urban municipality where they reside than nonrecipients; alternatively put, recipients are more likely to be migrants than nonrecipients. Among urban women, recipients are more likely to born in the Village Development Committee or urban municipality where they reside than nonrecipients.

With respect to education, recipients are much more likely to be attending school than nonrecipients. In addition, they are, on average, much more educated than nonrecipients. The higher mean education attainment of recipients is also evident when we look at the share that have obtained the SLC.

With respect to household characteristics, among urban women, recipients are more likely to come from households with absent members than nonrecipients. Recipients are more

likely to come from households that have a benefactor from outside the household than nonrecipients. Recipients are, on average, substantially wealthier than nonrecipients. Recipients differ from nonrecipients in terms of religion and caste and ethnic composition: They are more likely to be Hindu than nonrecipients, and more likely to come from the Brahmin/Chhetri or Newar communities and less likely to be come from the Terai middle caste, Dalit, Janajati, Muslim, and other caste communities than nonrecipients.

Finally, with respect to location, among urban women, recipients are more likely to come from Kathmandu Valley and less likely to come from the Terai than nonrecipients. Among urban men, recipients are more likely to come from the Hills and less likely to come from the Terai than nonrecipients.

The differences in mean characteristics between recipients and nonrecipients may themselves vary depending on the training field. To examine if this is the case, we decompose training into main fields, specifically basic computing, dressmaking/tailoring, and all other fields for female recipients; and basic computing and all other fields for male recipients. Table 4 reports pairwise differences in mean characteristics between recipients trained in a specific field (whom we refer to as "trainees" for short) and nonrecipients of training in any field ("nontrainees").

Trainees in basic computing appear to differ from trainees in other fields. As an extreme illustration, significant differences between trainees in basic computing and nontrainees in individual characteristics, such as relationship to the household head, age, marital status, and education, are in the *opposite* direction of significant differences between trainees in other fields and nontrainees. Specifically, relative to nontrainees, trainees in basic computing are less likely to be the household head and more likely to be children of the head of household, are on average younger, and are more likely to be attending school. In contrast, relative to nontrainees, trainees in other fields are more likely to be the household head and less likely to be children of the household head, are on average older, and are either just as likely, or less likely, to be attending school than nontrainees. Trainees in basic computing are less likely to be married than nontrainees, whereas female trainees in dressmaking/tailoring and male trainees in other fields are more likely to be married.

## V. Labor market effects of training

### A. *Analytical approach*

Has training improved labor market outcomes for recipients? To the best of our knowledge, Nepal lacks credible evidence on the effects of training from widely representative data. Chakravarty et al. (2015) and Bhatta et al. (2017) offer two relatively rigorous evaluations of selected short-term training interventions in Nepal, although the findings are likely not generalizable. Chakravarty et al. evaluate a small-scale variant of an existing training initiative undertaken by an international NGO in partnership with the government. The intervention offered one-to-three month-long training in a few selected fields (for example, dressmaking/tailoring, construction, electrical work), targeted to young women and other traditionally disadvantaged groups. Based on a difference-in-differences strategy (before versus after the intervention, qualifying versus nonqualifying applicants), the study finds that the intervention had significant positive effects on employment, hours worked, and earnings for qualifying applicants within a year after the training. Bhatta et al. evaluate public vouchers for short-term private training offered to traditionally disadvantaged groups in Kathmandu Valley. The vouchers were randomly assigned to a sample of marginally eligible candidates. The study finds significant positive effects for voucher recipients on employment, hours worked, and earnings within a year after the training.

Generally, the collective, rigorous international evidence on the effects of training programs on youth employment or earnings is promising but inconclusive. Tripney and Hombrados (2013) conduct a meta-evaluation of youth training programs in low- and middle-income countries, and Kluve et al. (2016) conduct a meta-evaluation of youth employment programs, looking at training programs separately. Both studies find that training programs have significant positive aggregate effects. In their meta-evaluation of active labor market programs globally, Card, Kluve, and Weber (2015) find that the aggregate effect of training programs targeted at youth is smaller than that for untargeted training programs. All three meta-evaluations additionally find substantial variability in effect sizes across included evaluation studies, and that large shares of (if not most) evaluation studies have insignificant results. McKenzie (2017) reviews only experimental evaluations of training and other active labor market interventions in low- and middle-income countries. The study finds that training interventions tend to have positive effects on the likelihood of employment and mean earnings that are either small or

insignificant, although the interventions tend to have significant, relatively large, positive effects on the likelihood of formal employment.

Here, using NLFS data, we examine whether the individual obtained training is associated with:

(1) Whether in employment;

(2) Conditional on employment, whether primarily engaged in wage employment (as opposed to self-employment), which we call wage work;

(3) Conditional on employment, whether primarily engaged in nonagricultural employment (as opposed to agricultural employment), which we call nonfarm work; and

(4) Hours-adjusted earnings from the worker's wage employment activities, which we call wage earnings.

Although of interest as an outcome, data on incomes or profits from self-employment activities were not gathered in the NLFS.

As noted earlier, training recipients systematically differ from nonrecipients in characteristics such as age, marital status, education, household economic status, caste, and region of residence. The poor overlap in the distribution of characteristics between recipients and nonrecipients can make estimates imprecise and sensitive to the choice of specification. To arrive at an optimal subsample, we use the approach suggested by Crump et al. (2009) and Imbens (2015) to discard observations with extreme predicted probabilities of training. The approach does not bias the estimates, as the optimal subsample depends on the joint distribution of characteristics and training status and not on the distribution of outcomes. Discarding observations with extreme predicted probabilities can also greatly improve the precision of the estimates.

We estimate the effects of training in two stages. In the first stage, we (1) estimate gender-specific regressions of whether the individual obtained training, (2) predict the individual probabilities of having obtained training, and (3) following the general optimal rule suggested by Crump et al. (2009), only retain individuals with predicted probabilities between 0.1 and 0.9. Performing this stage, we trim out 17% of recipients and 63% of nonrecipients from the full sample for the training receipt regression for women, and 13% of recipients and 52% of

nonrecipients from the full sample for the training receipt regression for men. Sample sizes for the outcome regressions are still large after the trimming.

Recipients and nonrecipients in the trimmed samples are more similar than in the full samples (see table A1). Differences in mean characteristics are substantially smaller in the trimmed samples relative to the corresponding full samples, and the differences between means for many characteristics lose significance in the trimmed samples.

In the second stage, we estimate gender-specific regressions of the effects of training only for individuals in the trimmed samples, controlling for all characteristics we examined in Table 3. Standard errors in all regressions are clustered at the PSU level, to account for potential correlation between individuals within the same PSU.

While we only discuss the estimated effects of training for the trimmed female and male samples, we also estimate regressions for the full female and male samples. The full-sample regression results are reported in appendix tables A2–A5. Note that our selected method provides arguably well-estimated associations between training and outcomes of interest, which we sometimes refer to as "effects." However, given the data, the method does not allow us to interpret these associations as causal. Also note that the associations are not representative of all recipients, but only those recipients who survived the trimming step.

Delving further, we additionally investigate the variation in the effects of training by selected sociodemographic subgroups: school attendance status, education attainment (completed grade 10 or less, passed the SLC only, completed at least intermediate education), and area of residence (rural or urban).[7] We also investigate the variation in the effects of training by selected training characteristics: type of training (short-term courses or TSLC/technical diploma programs), which we determined indirectly using information on the length of training; and major training field (basic computing and other fields for men; and basic computing, dressmaking/tailoring, and other fields for women). We examine whether the effects differ across subgroups as well as whether a given subgroup-specific effect is significant. In discussing the results, we focus on the latter.

While we attempt to adjust for selection into training, we do not adjust for selection into the various sociodemographic and training-related subgroups. The training and schooling decisions may be jointly determined, as may be training and residence decisions. The decision to

[7] All training of 12 months or more is classified as training through TSLC/technical diploma programs.

obtain training may be influenced by the type or length of training. The subgroup analysis may then be a source of bias. Thus, the results should be interpreted as suggestive at best.

B. *Effects for women*

Table 5 reports estimated average marginal effects (AMEs) of training for women. Training is associated with an increase in the likelihood of employment by 6 percentage points (pp.), or by 10% in relative terms. Training is also associated with increases in the likelihoods of wage work by 5 pp. (31%) and nonfarm work by 16 pp. (46%). However, training does not appear to be associated with wage earnings.[8]

Table 5 also reports training effects interacted with schooling status, education attainment, and area of residence for women. Whether training effects are significant appears to differ by sociodemographic groups. With respect to schooling status, training is associated with increases in the likelihoods of employment (9 pp.) and nonfarm work (17 pp.) for those who have completed school, and increases in the likelihoods of wage work by 7 pp. and nonfarm work by 11 pp. for those attending school. With respect to education attainment, training is associated with an increase in the likelihood of nonwage work by 21 pp. for those who have not obtained the SLC; increases in the likelihood of employment by 6 pp., the likelihood of wage work by 7 pp., and the likelihood of nonfarm work by 16 pp. for those who have obtained the SLC only; and an increase in the likelihood of employment by 9 pp. for those who have completed at least intermediate education. With respect to area of residence, training is associated with increases in the likelihood of employment by 7 pp. and the likelihood of nonfarm work by 13 pp. for urban residents, and an increase in the likelihood of nonfarm work by 16 pp. for rural residents. Training does not appear to be associated with wage earnings for any of the sociodemographic groups, with the exception of those attending school, for whom training is associated with an increase in wage earnings by 16%.

Table 6 reports training effects separately by type and length of training subgroups for women. Training through short courses is associated with increases in the likelihoods of employment by 6 pp., wage work by 4 pp., and nonfarm work by 14 pp. Training through

[8] The employment rate is 63%, the wage work share is 16%, and the nonfarm work share is 35% for female training nonrecipients in the trimmed sample.

TSLC/technical diploma programs is only associated with an increase in the likelihood of nonfarm work by 15 pp.

Training in basic computing is only associated with an increase in the likelihood of nonfarm work by 11 pp. Training in dressmaking/tailoring is associated with increases in the likelihoods of employment by 6 pp. and nonfarm work by 16 pp. Training in dressmaking/tailoring does not appear to be associated with the likelihood of wage work. Dressmaking/tailoring tends to be a self-employment activity for Nepali women: 71% of female youth engaged in dressmaking/tailoring were self-employed based on NLFS data. Training in other fields is associated with increases in the likelihoods of employment by 12 pp., wage work by 8 pp., and nonfarm work by 19 pp. The mean effect of training on wage earnings is insignificant irrespective of the type or major field of training.

C. *Effects for men*

Tables 7 and 8 report estimated AMEs of training for men. The structure of the tables mirror tables 5 and 6 for women, respectively. Training does not appear to be associated with any outcome.

In terms of training effects interacted with sociodemographic groups, training does not appear to be associated with any outcome for those who have completed their schooling, or those who have obtained the SLC only or with less schooling. Training also does not appear to be associated with any outcome for rural or urban residents as groups. For those who are attending school, training is associated with increases in the likelihood of wage work by 14 pp. and the likelihood of nonfarm work by 8 pp. For those who have completed at least intermediate education, training is associated with an increase in the likelihood of employment by 11 pp.

In terms of training effects by type and length of training subgroups, training through short-term courses is associated with an increase in the likelihood of wage work by 5 pp. Training through TSLC/technical diploma programs is associated with an increase in the likelihood of employment by 8 pp., and with a 15% increase in wage earnings. Neither training in basic computing nor training in other fields appears to be associated with any outcome.

D. *Plausible explanations*

To recapitulate, in general, we find that training is associated with shifts in employment for women, along both extensive and intensive margins, but not so for men. In general, we do not find that training is associated with higher wage earnings for either gender.

At least two competing explanations may account for the general absence of an effect of training on wage earnings. First, the lack of skills may be a binding constraint for local labor market success but the obtained training fails to improve skills. Second, the obtained training improves skills but only relaxing the skills constraint is not sufficient for labor market success.

Recent evidence from other low-income countries suggests that financial capital constraints may be dominant. Based on an experimental evaluation, Hicks et al. (2015) find that cash vouchers given to out-of-school youth for training in vocational education institutions increased training but did not, in general, lead to an increase in employment and earnings, measured variously. The study also reports that interviews with training students indicated that the lack of financial capital for self-employment activities serves as a barrier to the effective use of training. Also based on an experimental evaluation, Blattman et al. (2014) find that cash grants given to poor youth groups in Uganda to pay for training and business startup costs led to higher investments in training and business assets, and higher employment and earnings measured variously, with most of the grant funds used to buy business tools, materials, and supplies.

Suggestive evidence indicates that financial capital constraints may be important for labor market success in Nepal. The School-to-Work Transition Survey asked self-employed workers what was the most important issue they faced in undertaking their activities. Among individuals aged 16–29, in rural areas, the lack of financial capital was the most commonly reported issue, at 27%, while in urban areas, it was the second-most commonly reported issue, at 16%. (The most commonly reported issue was intense market competition, at 46%.) Other response options to the question included "poor quality staff" and "lack of business expertise." Treating these other response options as signifying inadequate labor skills, only about 11% of rural or urban self-employed workers reported skills to be an issue.

Notwithstanding the general result of a lack of a training effect on wage earnings for either gender, the differential results by gender of the training effects on employment are consistent with those from the evaluation of short-term training in Nepal by Chakravarty et al.

(2015). Their evaluation results also differ by gender. For men, they find that the intervention had significant positive effects on the likelihoods of nonfarm work and work in the field in which they were trained in, that it did not have significant effects on the likelihood of employment or on work hours, and that the significance of the positive effect on labor earnings depended on their specific earnings measure. In contrast, for women, they find that the intervention had significant positive effects on all of the study's labor market measures.[9]

The differing results we find between men and women are also consistent with evidence from meta-evaluations, such as of youth employment programs globally (Kluve et al. 2016), youth training programs in low- and middle-income countries (Tripney and Hombrados 2013), and active labor market programs globally (Card et al. 2015). These evaluations find larger aggregate effects for women than for men, although the aggregate effects for women are not always statistically different from those for men.[10] [11]

We posit three explanations for the differential employment effects by gender. First, the most common training for men was in basic computing, and we find that the effects of basic computing tend to be insignificant for both genders. This suggests that training in basic computing may often be for nonwork reasons. Second, given that our analysis data were collected when the labor migration flow of Nepali men to other countries was already substantial, the trained men in the analysis sample—in other words, trained men *in* Nepal—may be negatively selected relative to all trained men, and thus the effects of training for this sample may be biased towards zero. Third, the trained men in the analysis sample may have obtained training to work in external labor markets, and decided to wait for, or actively seek, external work opportunities instead of seeking local labor market success. One explanation that we discount is that the results for men may be due to ceiling constraints: the rates of employment, wage work, and nonfarm work are well below 100% for untrained men.

[9] In their evaluation of vouchers for short-term training in Nepal, Bhatta et al. (2017) find that the intervention had significant positive effects on both women and men, and that the effect sizes were similar across gender.

[10] More precisely, Card et al. (2015) find that active labor market programs for women only have larger aggregate effects than programs for men only or those for both genders.

[11] Reviewing only experimental evaluations of training programs in low- and middle-income countries, McKenzie (2017) does not find evidence indicative of generally larger effects for women than men. McKenzie also finds that many of the evaluations do not formally test for gender differences in effects.

## VI. Interest in, and perceptions of, training

### A. *Training desire rates*

We examine NLFS data on the individual's stated preference for training, specifically whether the individual desires training, and, if so, what specific training field he she desires. Estimates of training desire rates based on these questions presumably overstate the extent of effective demand for training (that is, the rate of individuals who are willing to obtain training and able to incur any costs, including opportunity costs, of training).

Figure 6 shows training desire rates, separately for youth and nonyouth cohorts. There appears to be extensive interest in training among youth in Nepal. The training desire rate for youth is 39%, and less than half as much for nonyouth, at 18%. Youth training desire rates range from a low of 29% for urban men to a high of 41% for rural women. Youth training desire rates appear to be higher in rural than urban areas. For example, for female youth, the training desire rate is 41% in rural areas, whereas it is 35% in urban areas. Youth training desire rates are comparable between women and men in rural areas, and higher for women than men in urban areas. In the rest of the section, unless noted, all statistics are restricted to youth.

Figure 7 contrasts training desire rates for Nepal in 2008 to those for Bangladesh in 2013, the only other country from the region for which we found comparable questions in a recent national labor force survey. Training desire rates for Nepal are strikingly similar to those for Bangladesh. At the country level, the desire rate is 39% for Nepal compared to 37% for Bangladesh. Training desire rates are also similar between the two countries for all the gender-by-location subgroups.

Figure 8 shows training desire rates across regions within Nepal. Interest in training by women and men is especially extensive in regions outside of Kathmandu Valley. For example, for women, training desire rates range from 35% (rural Hills) to 47% (urban Terai) outside Kathmandu Valley, whereas it is 19% in Kathmandu Valley.

Figure 9 shows training desire–age profiles. In general, training desire rates are higher among individuals in their early twenties than individuals in their late twenties or early thirties. Figure 10 shows training desire–schooling status profiles (panel A) and training desire–education attainment profiles (panel B). Training desire rates for those attending school are either higher or similar to those who have completed their schooling. Training desire rates for rural women and

men jump for those who have obtained the SLC only or completed at least intermediate education. We do not observe a similar pattern for urban women and men.

B. *Desired training fields*

Table 9 reports the distribution of desired training fields. Although our wording is loose here, all statistics are for those who express interest in training. Among women, training in dressmaking/tailoring had the highest interest by a large margin: 64% of rural women and 47% of urban women desire training in it. Interest in training in basic computing and farming/livestock management ranked next among rural women, at 12% each, whereas interest in training in basic computing and hairdressing/beautician services ranked next among urban women, at 26% and 8%, respectively.

Among men, training in basic computing had the highest interest: 48% of urban men and 27% of rural men desire training in basic computing. Interest in basic computing was followed by interest in training in farming/livestock management (20%), manufacturing and repair (13%), and construction (12%) among rural men, and manufacturing and repair (14%), driving (9%), and other services fields (9%) among urban men.

C. *Characteristics of those who desire training*

Table 10 reports pairwise differences in mean characteristics between those who desire training versus those who do not. As discussed earlier in Section IV.D, those who obtained training were on average older and wealthier, and more likely to come from Kathmandu Valley than those who did not obtain training. In contrast, those who desire training are on average younger and less wealthy, and more likely to come from rural or urban Terai than those who do not desire training.

We also examine whether training desire rates differ based on the individual's training and employment status. Those who desire training are more likely to have obtained training than those who do not desire training. Among rural men and urban women, those who desire training are more likely to be employed than those who do not desire training. Apart from rural women, those who desire training are more likely to be self-employed in agriculture than those who do not desire training. Among rural women, those who desire training are more likely to be wage-employed in services or self-employed in industry than those who do not desire training.

D. *Relationship between obtained and desired training fields*

We found that individuals who desire training are more likely to have obtained training than those who do not desire training. Does the field in which the individual desires training differ from the field in which the individual has already obtained training (which may indicate interest in reskilling), or are the fields the same (which may indicate interest in upskilling)? We explore this question in relation to training in basic computing and dressmaking/tailoring, given that these two fields have by far the highest rates of both interest and receipt.

Panel A of figure 11 shows the rates of individuals who desire training in basic computing, separately for those who have received training in basic computing, those who have received training in other fields, and those who have not obtained any training. The majority of those trained in basic computing desire more training in the same field. The rates range from 56% for urban women to 82% for rural men. Rates for individuals trained in other fields or for individuals who have not obtained training and desire training in basic computing are much lower. For individuals who have not obtained any training, the percentage that desires training in basic computing ranges from 10% for rural women to 42% for urban men. For individuals trained in other fields, the percentage ranges from 9% for rural women to 24% for rural men.

Panel B in the same figure presents rates for women who desire training in dressmaking/tailoring, separately for those who have already received training in the same field, those who have received training in other fields, and those who have not obtained any training. There is extensive interest in training for dressmaking/tailoring among women already trained in dressmaking/tailoring, as well as among women who have not obtained any training. For example, 72% of rural women already trained in dressmaking/tailoring desire training in the same field, and 65% of rural women without any training desire training in dressmaking/tailoring. Interest in training in this field is much lower among those trained in other fields. For example, 23% of rural women trained in other fields desire training in dressmaking/tailoring.

E. *Perceptions on education and training*

Using SWTS data, figure 12 shows the views held by employed and unemployed workers aged 16–29 regarding the value of human capital accumulation (collectively, education and

training) in finding employment. Fifty-five percent of employed workers reported that their education and training was relevant, followed by 26% who reported that they were underqualified. Nineteen percent of employed workers reported that inadequate qualifications were the main difficulty they faced finding employment, second only to inadequate employment opportunities (26%).

Among unemployed workers, 33% and 32% reported that insufficient employment opportunities and insufficient qualifications, respectively, were the main difficulties they faced in finding employment, followed by insufficient work experience (15%). The majority of unemployed workers (78%), viewed their education or training to be useful for finding employment, even if the education or training was insufficient. When asked what type of education or training would be most useful for finding employment, the most common responses were completing secondary or tertiary education (27%), training in computing and information technology (27%), training in technical institutes (presumably in TSLC/technical diploma programs) (19%), and employment apprenticeships (17%).

## VII. Conclusion

Under the standard basic model, individuals demand training if the private stream of expected benefits from training (net of costs) is positive. Using labor earnings as the measure of benefits, the evidence we find suggests that the condition may be unmet in Nepal. The problem may lie within the training production function in terms of quantity and quality, which is what most training projects in Nepal have fixed their sights on. Alternatively, it may lie within the labor earnings production function broadly. That is, the effect of training on labor earnings may depend on factors outside of training, such as the acquisition of financial and physical capital for income-generating activities, an expanding market for skilled labor, and the existing labor market structure. With respect to the labor market structure, if, for example, the wage labor market is characterized by monopsonistic employers, trained workers may obtain lower returns to training even if it induces higher labor productivity.

In the case of women, even if labor earnings are no greater for training recipients than for nonrecipients, we find that training is associated with a higher likelihood of employment. Employment may be welfare-improving for women measured along nonmonetary dimensions, as suggested, for example, by Chakravarty et al. (2015).

Even if a compelling case existed in the past, the rationale for public intervention in the training market for Nepal should be reevaluated, as the current landscape is radically different in terms of formal training supply.[12] Without public intervention, will there be a missing market for training, where the price at which private providers are willing to offer training exceeds the price that workers—particularly poorer workers—are willing to pay? If so, what are the sources behind training market failure? Answers to these questions are vital for designing public interventions that address the specific sources of training market failure.

We find that a large share of workers, especially poorer workers, report that they are interested in training. However, these workers may still underinvest in training. In general, workers are predicted to underinvest in training for several reasons. They may: (1) not be able to afford the costs of training, (2) have high discount rates or are present biased, (3) be averse to riskiness or uncertainty in the returns to training, or (4) face costs in signaling the productivity gain induced by training to employers (Brunello and De Paola 2009). Which reason predominates may differ across workers. Compared to richer workers, the human-capital investment behavior of poorer workers may be more constrained by the noted reasons.

Nepal needs rigorous empirical research to inform the extent and nature of public intervention in the labor market in general and in the training market in particular. In terms of the latter, we note four areas where evidence is missing but where it would be valuable for policymaking. First is to measure the willingness of workers to pay for training as well as the willingness of employers to pay for trained workers, examining the relative importance of different attributes of training and how different attributes are traded off by workers and employers. Second is to measure perceptions of training and its returns and the risk, uncertainty, and time preferences of the target population for training, and to investigate the associations of perceptions and preferences with training demand. Third is to conduct cost-benefit or cost-effectiveness analyses of public interventions in the training market, where costs are measured comprehensively (that is, covering the direct and indirect costs incurred by training providers, and the explicit and opportunity costs borne by recipients). Fourth is to investigate employer-provided training, in part to learn what role can be played by government in terms of promoting the effectiveness, efficiency, and equity effects of such training.

[12] We are unable to find any studies for Nepal that justify public intervention based on an analysis of failures in the formal training market.

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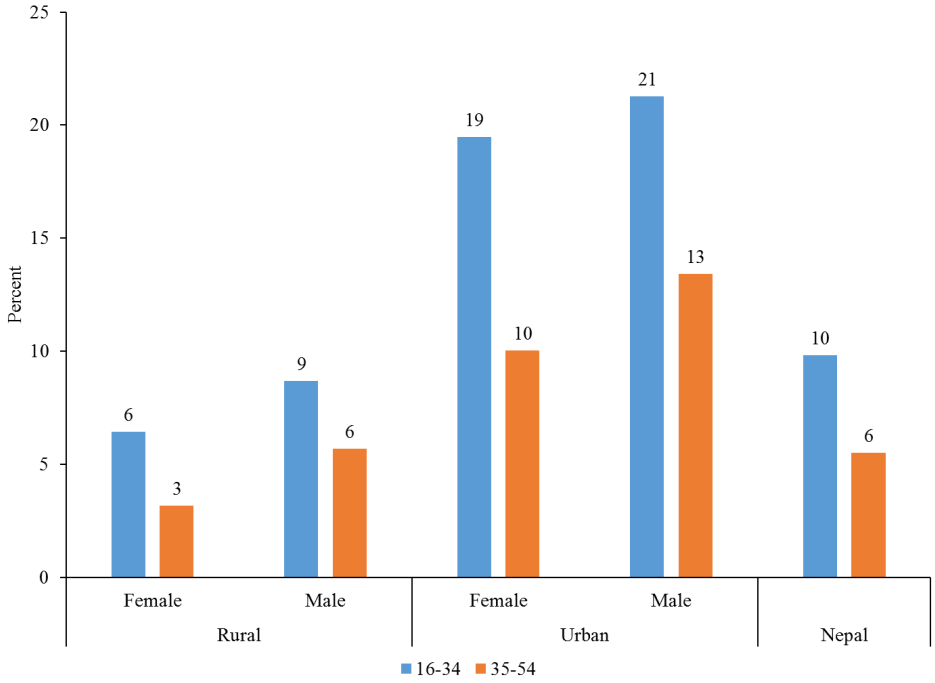
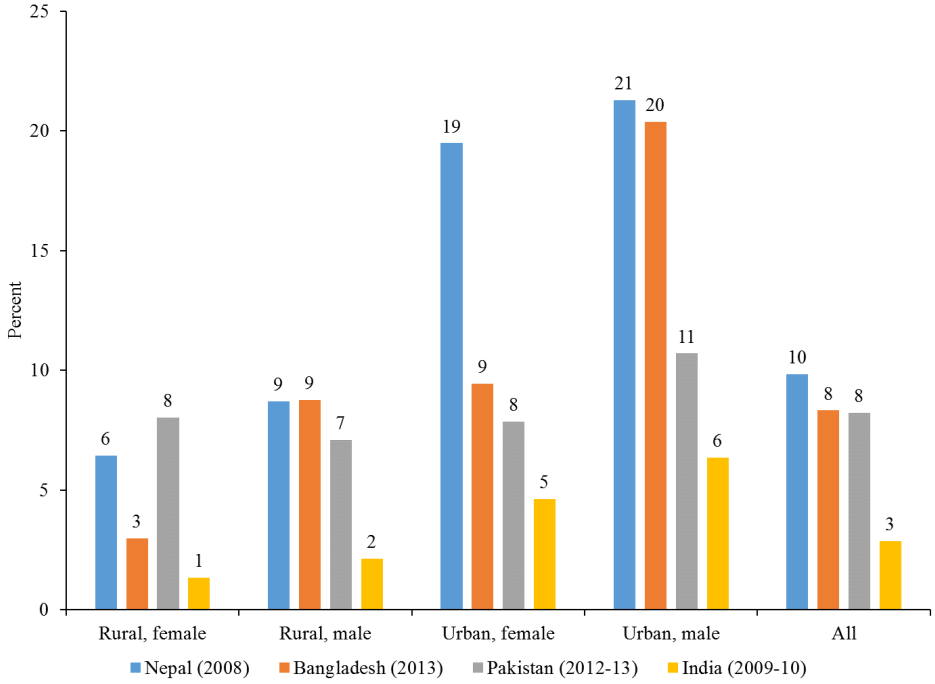
Figure 1. Training rates, by gender and urban vs. rural



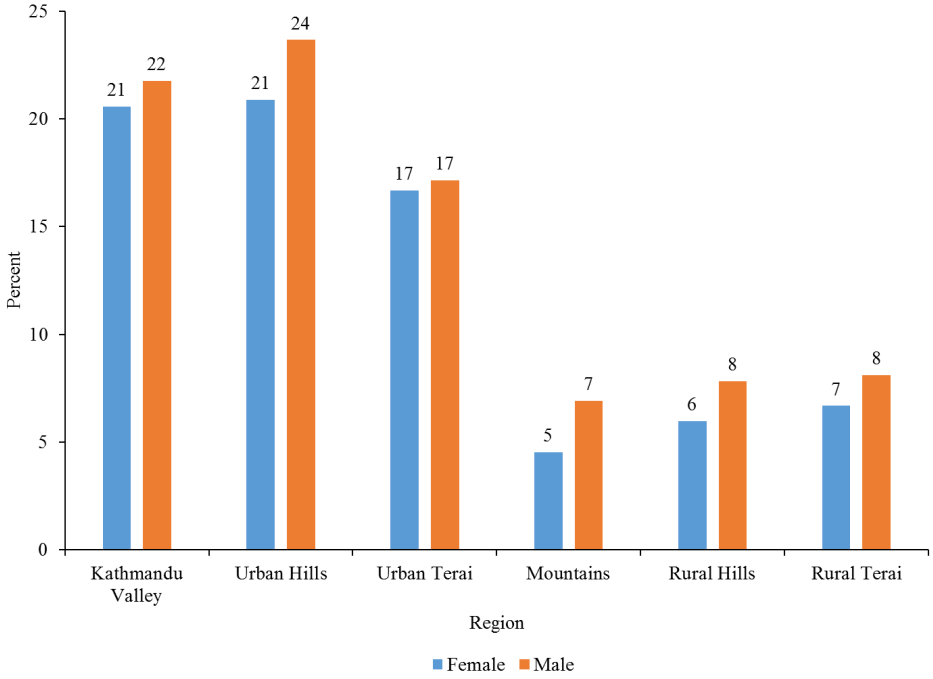

*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates are adjusted for sampling weights.

Figure 2. Training rates for Nepal versus other South Asian countries, individuals aged 16–34



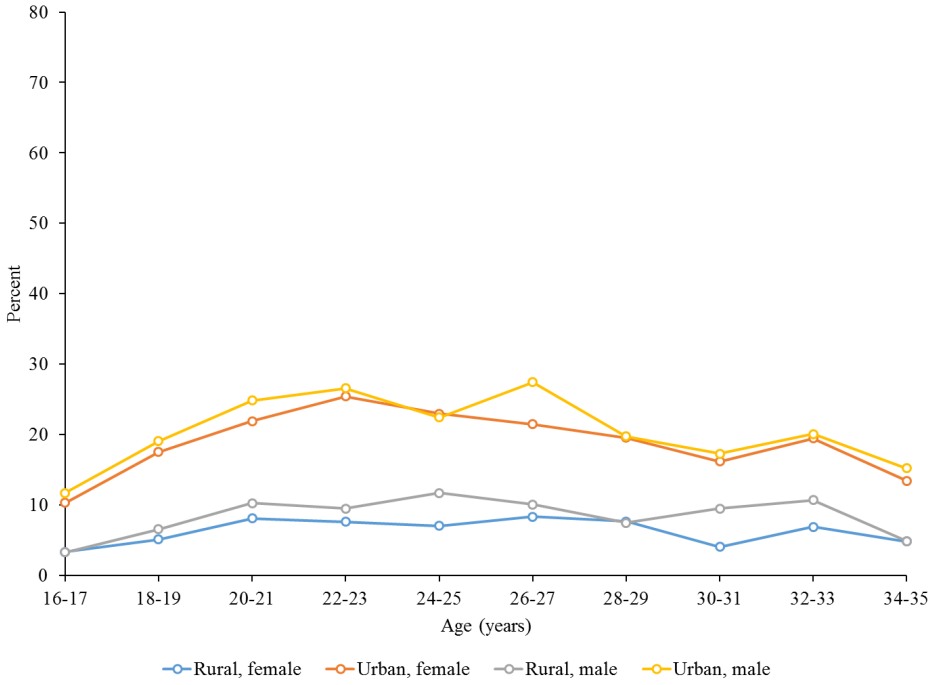

*Source*: Own estimates using labor force survey data for Nepal (2008), Bangladesh (2013), and Pakistan (2012–13), and data from India's National Sample Survey 66th round (2009–10).
*Note*: All estimates are adjusted for sampling weights.

Figure 3. Training rates by region, individuals aged 16–34




*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates are adjusted for sampling weights.

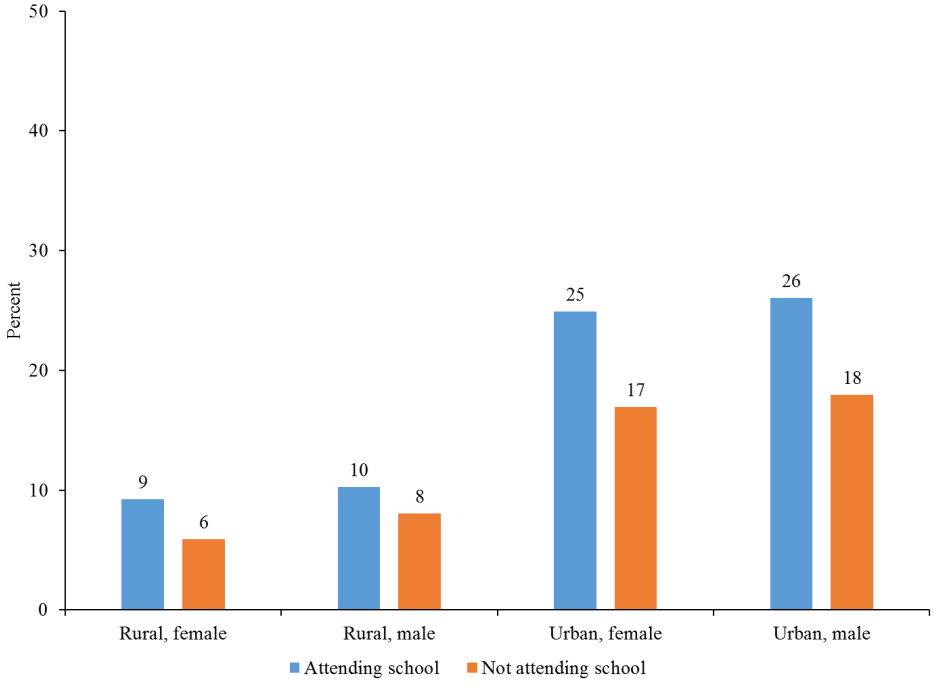
Figure 4. Training—age profiles



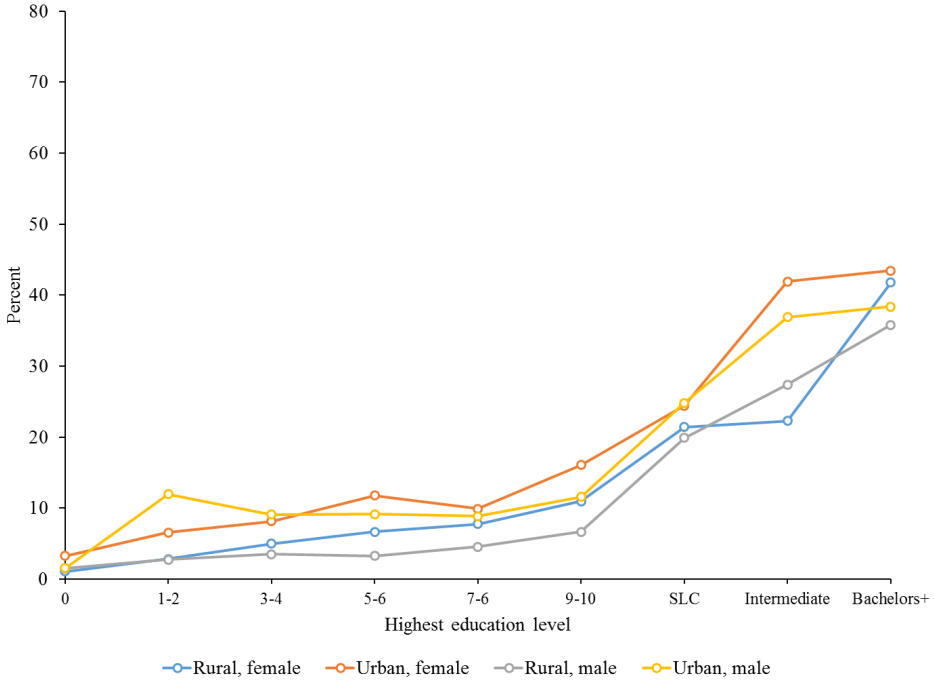

*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates are adjusted for sampling weights.

Figure 5. Training—education profiles, individuals aged 16–34

A. *Schooling status*




B. *Education attainment*




*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates are adjusted for sampling weights. SLC = School Learning Certificate.

Table 1. Distribution of training fields, individuals aged 16–34

| Field | Rural | | Urban | |
|---|---|---|---|---|
| | Female | Male | Female | Male |
| | *In percent* | | | |
| | (1) | (2) | (3) | (4) |
| Teaching | 6 | 4 | 3 | 2 |
| Handicrafts | 7 | 3 | 5 | 3 |
| Fine and performing arts | 0 | 0 | 2 | 2 |
| Business and accounting | 1 | 1 | 2 | 2 |
| Basic computing | 20 | 37 | 38 | 57 |
| Health services | 9 | 9 | 7 | 5 |
| Construction | 1 | 13 | 0 | 5 |
| Dressmaking/tailoring | 48 | 0 | 30 | 0 |
| Small manufacturing and repair | 1 | 10 | 1 | 7 |
| Agriculture and livestock management | 4 | 8 | 2 | 1 |
| Driving and motor vehicle operation | 0 | 11 | 0 | 8 |
| Hairdressing/beautician services | 3 | 0 | 8 | 0 |
| Other service trades | 1 | 5 | 2 | 10 |
| Observations | 426 | 353 | 1,272 | 1,198 |

*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates are adjusted for sampling weights.

Table 2: Characteristics of training recipients by field, individuals aged 16–34

| Field | Rural | | | | | Urban | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Percent female | Percent attending school | Percent obtained SLC | Percent short-term courses | Median training length | Percent female | Percent attending school | Percent obtained SLC | Percent short-term courses | Median training length |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Teaching | 63 | 36 | 89 | 98 | 4 | 65 | 21 | 88 | 90 | 6 |
| Handicrafts | 76 | 6 | 21 | 100 | 3 | 68 | 23 | 43 | 92 | 6 |
| Fine and performing arts | 100 | 0 | 100 | 100 | 1 | 51 | 25 | 71 | 55 | 9 |
| Business and accounting | 43 | 25 | 43 | 100 | 1 | 48 | 34 | 84 | 96 | 2 |
| Basic computing | 39 | 72 | 94 | 91 | 3 | 41 | 73 | 95 | 92 | 3 |
| Health services | 54 | 19 | 60 | 46 | 15 | 63 | 40 | 86 | 33 | 15 |
| Construction | 12 | 13 | 37 | 91 | 3 | 9 | 29 | 54 | 84 | 6 |
| Dressmaking/tailoring | 91 | 8 | 19 | 94 | 3 | 90 | 14 | 38 | 95 | 3 |
| Small manufacturing and repair | 8 | 10 | 41 | 83 | 3 | 17 | 23 | 54 | 81 | 6 |
| Agriculture and livestock management | 40 | 12 | 40 | 85 | 1 | 58 | 28 | 58 | 85 | 1 |
| Driving and motor vehicle operation | 3 | 1 | 11 | 97 | 3 | 2 | 8 | 28 | 94 | 3 |
| Hairdressing/beautician services | 94 | 19 | 42 | 93 | 6 | 99 | 26 | 71 | 92 | 6 |
| Other service fields | 16 | 18 | 28 | 86 | 3 | 18 | 25 | 72 | 85 | 3 |

*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* SLC = School Leaving Certificate. Short-term courses are defined as training of less than 12 months; training of one month or less was rounded up to one month. All estimates are adjusted for sampling weights.

Table 3. Differences in mean characteristics for training recipients vs. nonrecipients, individuals aged 16–34

| Characteristic | Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|---|
| | Female | | Male | | Female | | Male | |
| | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Rel. to head: Head | 0.388 | 0.004 | 0.307 | 0.035 | 0.442 | –0.068*** | 0.311 | –0.018 |
| Rel. to head: Spouse | 0.282 | –0.040* | 0.007 | 0.005 | 0.310 | –0.071*** | 0.022 | –0.002 |
| Rel. to head: Son/daughter (in law) | 0.548 | 0.015 | 0.606 | –0.052 | 0.451 | 0.045** | 0.509 | –0.010 |
| Rel. to head: Grandchild | 0.014 | –0.007* | 0.019 | 0.007 | 0.015 | 0.015* | 0.018 | 0.000 |
| Rel. to head: Other relative | 0.044 | –0.005 | 0.059 | 0.013 | 0.074 | 0.013 | 0.125 | 0.025 |
| Age | 23.67 | 0.571*** | 23.31 | 1.310*** | 24.03 | 0.320 | 23.59 | 0.420* |
| Married | 0.749 | –0.086*** | 0.565 | –0.012 | 0.663 | –0.130*** | 0.440 | –0.077*** |
| Born in present VDC/municipality | 0.418 | 0.006 | 0.842 | –0.127*** | 0.341 | 0.037* | 0.470 | –0.047** |
| Attending an academic institution | 0.161 | 0.076*** | 0.277 | 0.068** | 0.300 | 0.112*** | 0.387 | 0.129*** |
| Education (in years) | 3.859 | 4.281*** | 6.278 | 3.306*** | 7.075 | 3.349*** | 8.661 | 2.431*** |
| Passed SLC | 0.157 | 0.380*** | 0.282 | 0.448*** | 0.441 | 0.367*** | 0.553 | 0.304*** |
| Household has absentee(s) | 0.492 | 0.014 | 0.325 | –0.270 | 0.304 | 0.044*** | 0.195 | 0.026 |
| Household has benefactor | 0.038 | 0.030** | 0.032 | 0.042** | 0.055 | 0.025** | 0.067 | 0.035** |
| Household asset index | –0.192 | 0.758*** | –0.176 | 0.672*** | 1.310 | 0.544*** | 1.405 | 0.515*** |
| Hindu | 0.856 | 0.034** | 0.848 | 0.039* | 0.844 | 0.056*** | 0.848 | 0.039*** |
| Brahmin/Chhetri | 0.306 | 0.167*** | 0.286 | 0126*** | 0.375 | 0.117*** | 0.370 | 0.137*** |
| Terai middle castes | 0.121 | –0.047*** | 0.139 | –0.220 | 0.078 | –0.031*** | 0.101 | –0.049*** |
| Dalit | 0.130 | –0.589*** | 0.121 | –0.051*** | 0.075 | –0.046*** | 0.072 | –0.058*** |
| Newar | 0.036 | 0.059*** | 0.039 | 0.039** | 0.144 | 0.058*** | 0.151 | 0.010 |
| Janajati | 0.340 | –0.067** | 0.349 | –0.062** | 0.279 | –0.071*** | 0.249 | –0.020 |
| Muslim | 0.047 | –0.038*** | 0.043 | –0.020** | 0.035 | –0.022*** | 0.043 | –0.020*** |
| Other castes | 0.020 | –0.015*** | 0.022 | –0.010* | 0.014 | –0.005 | 0.015 | 0.001 |
| Kathmandu Valley | — | — | — | — | 0.326 | 0.039* | 0.394 | 0.040 |
| Urban Terai | — | — | — | — | 0.440 | –0.060** | 0.423 | –0.077*** |
| Urban Hills | — | — | — | — | 0.234 | 0.021 | 0.183 | 0.037** |

Table 3. Differences in mean characteristics for training recipients vs. nonrecipients, individuals aged 16–34

| Characteristic | Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|---|
| | Female | | Male | | Female | | Male | |
| | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Rural Terai | 0.508 | 0.039 | 0.523 | 0.037 | — | — | — | — |
| Rural Hills | 0.416 | –0.018 | 0.396 | –0.024 | — | — | — | — |
| Mountains | 0.076 | –0.021 | 0.803 | –0.013 | — | — | — | — |

*Source*: Own estimates using 2008 Nepal Labour Force Survey data.

*Note:* — = Not applicable; SLC = School Leaving Certificate; VDC = Village Development Committee. Columns (1), (3), (5), and (7) report means for training nonrecipients; Columns (2), (4), (6), and (8) report the difference in means between recipients and nonrecipients. Inference based on robust standard errors clustered at the primary sampling unit level. Statistical significance: *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 4. Differences in mean characteristics between nonrecipients and recipients, by field, individuals aged 16–34

| Characteristic | Female | | | | Male | | |
|---|---|---|---|---|---|---|---|
| | Mean | Difference from mean for no training | | | Mean | Difference from mean for no training | |
| | No training | Basic computing | Dressmaking/ tailoring | Other fields | No training | Basic computing | Other fields |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Rel. to head: Head | 0.396 | –0.225*** | 0.062** | 0.072** | 0.308 | –0.121*** | 0.124*** |
| Rel. to head: Spouse | 0.286 | –0.204*** | 0.013 | 0.008 | 0.010 | 0.001 | 0.008 |
| Rel. to head: Son/daughter (in law) | 0.533 | 0.138*** | –0.038 | –0.053* | 0.587 | 0.053* | –0.145*** |
| Rel. to head: Grandchild | 0.014 | 0.023** | –0.009*** | –0.003 | 0.019 | 0.013 | –0.003 |
| Rel. to head: Other relative | 0.049 | 0.063*** | –0.012 | –0.010 | 0.072 | 0.042*** | 0.025 |
| Age | 23.72 | –2.288*** | 1.376*** | 1.841*** | 23.36 | –1.156*** | 2.764*** |
| Married | 0.736 | –0.457*** | 0.047** | –0.065** | 0.540 | –0.326*** | 0.145*** |
| Born in present VDC/municipality | 0.406 | 0.102*** | –0.053** | –0.017 | 0.769 | –0.239*** | –0.123*** |
| Attending an academic institution | 0.182 | 0.571*** | –0.090*** | 0.022 | 0.298 | 0.411*** | –0.122*** |
| Education (in years) | 4.346 | 7.366*** | 3.139*** | 4.395*** | 6.748 | 4.930*** | 2.265*** |
| Passed SLC | 0.200 | 0.787*** | 0.205*** | 0.455*** | 0.335 | 0.641*** | 0.288*** |
| Household has absentee(s) | 0.463 | –0.057* | 0.035 | –0.053 | 0.300 | –0.007 | –0.055** |
| Household has benefactor | 0.041 | 0.041** | 0.033** | 0.023 | 0.039 | 0.083*** | 0.017 |
| Household asset index | 0.035 | 1.670*** | 0.688*** | 0.930*** | 0.136 | 1.480*** | 0.523*** |
| Hindu | 0.854 | 0.058*** | 0.037** | 0.028 | 0.848 | 0.044** | 0.035** |
| Brahmin/Chhetri | 0.316 | 0.257*** | 0.100*** | 0.169*** | 0.303 | 0.251*** | 0.066** |
| Terai middle castes | 0.114 | –0.097*** | –0.032* | –0.036* | 0.131 | –0.076*** | –0.014 |
| Dalit | 0.121 | –0.093*** | –0.067*** | –0.044** | 0.111 | –0.091*** | –0.043*** |
| Newar | 0.052 | 0.127*** | 0.085*** | 0.047*** | 0.061 | 0.074*** | 0.033** |
| Janajati | 0.331 | –0.146*** | –0.033 | –0.094*** | 0.329 | –0.122*** | –0.021 |
| Muslim | 0.045 | –0.031*** | –0.042*** | –0.030*** | 0.043 | –0.023*** | –0.018** |
| Other castes | 0.019 | –0.017*** | –0.011** | –0.012* | 0.020 | –0.013*** | –0.002 |
| Kathmandu Valley | 0.049 | 0.177*** | 0.030*** | 0.098*** | 0.078 | 0.166*** | 0.052*** |
| Urban Terai | 0.066 | 0.114*** | 0.061*** | 0.076*** | 0.084 | 0.096*** | 0.032*** |

Table 4. Differences in mean characteristics between nonrecipients and recipients, by field, individuals aged 16–34

| Characteristic | Female | | | | Male | | |
|---|---|---|---|---|---|---|---|
| | Mean | Difference from mean for no training | | | Mean | Difference from mean for no training | |
| | No training | Basic computing | Dressmaking/ tailoring | Other fields | No training | Basic computing | Other fields |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Urban Hills | 0.035 | 0.103*** | 0.041*** | 0.058*** | 0.036 | 0.068*** | 0.046*** |
| Rural Terai | 0.431 | –0.197*** | 0.003 | –0.135*** | 0.420 | –0.160*** | –0.039 |
| Rural Hills | 0.353 | –0.133*** | –0.108*** | –0.088*** | 0.318 | –0.125*** | –0.081*** |
| Mountains | 0.065 | –0.065*** | –0.026* | –0.009 | 0.064 | –0.044*** | –0.010 |

*Source*: Own estimates based on 2008 Nepal Labour Force Survey data.
*Note:* SLC=School Leaving Certificate; VDC = Village Development Committee. Inference based on robust standard errors clustered at the primary sampling unit level. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1.

Table 5. Training effects for females aged 16–34, overall and by schooling level and location, trimmed sample

| | Employment | Wage work | Nonfarm work | Log wage earnings |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Training | 0.061*** | 0.045** | 0.156*** | 0.013 |
| | (0.020) | (0.019) | (0.026) | (0.066) |
| A. *Heterogeneous effects by schooling status* | | | | |
| Training ($\beta_1$) | 0.093*** | 0.032 | 0.171*** | –0.077 |
| | (0.025) | (0.022) | (0.031) | (0.077) |
| Training×attending school ($\beta_2$) | –0.076** | 0.041 | –0.057 | 0.239* |
| | (0.036) | (0.037) | (0.048) | (0.144) |
| $\beta_1+\beta_2>0$; *p*–value | 0.558 | 0.020 | 0.005 | 0.177 |
| B. *Heterogeneous effects by education attainment* | | | | |
| Training ($\beta_1$) | 0.039 | 0.045 | 0.209*** | –0.128 |
| | (0.037) | (0.036) | (0.038) | (0.148) |
| Training×passed SLC only ($\beta_2$) | 0.021 | 0.028 | –0.048 | 0.223 |
| | (0.046) | (0.051) | (0.053) | (0.218) |
| Training×Intermediate or higher ($\beta_3$) | 0.048 | –0.031 | –0.164*** | 0.154 |
| | (0.049) | (0.044) | (0.056) | (0.168) |
| $\beta_1+\beta_2>0$; *p*–value | 0.053 | 0.032 | 0.000 | 0.520 |
| $\beta_1+\beta_3>0$; *p*–value | 0.003 | 0.615 | 0.345 | 0.746 |
| C. *Heterogeneous effects by location* | | | | |
| Training ($\beta_1$) | 0.072*** | 0.035 | 0.129*** | –0.083 |
| | (0.018) | (0.023) | (0.028) | (0.061) |
| Training×rural ($\beta_2$) | –0.018 | 0.006 | 0.027 | 0.153 |
| | (0.039) | (0.036) | (0.043) | (0.139) |
| $\beta_1+\beta_2>0$; *p*–value | 0.117 | 0.141 | 0.000 | 0.568 |
| Observations | 5,332 | 2,803 | 2,814 | 622 |

*Source*: Own estimates based on 2008 Nepal Labour Force Survey data.

*Note:* SLC = School Leaving Certificate. Wage work and nonfarm work are conditional on employment, and log wage earnings are conditional on wage work. Employment, wage work, and nonfarm work regressions are estimated as logit based on maximum likelihood, and log wage earnings regressions are estimated based on least squares. All regressions control for the individual's relation to the head of household, age, marital status, current schooling status, education attainment in years, a standardized index of household consumptive assets, and region identifiers. The regressions also control for whether the individual obtained the School Leaving Certificate; what his or her caste is; whether the individual's household has a private benefactor; and whether the individual's household has an absentee member. The propensity-score trimmed sample only includes observations with predicted values between 0.1 and 0.9 in a training-receipt logit regression. Robust standard errors, clustered at the primary sampling unit level, are reported in parentheses. All estimates are adjusted for sampling weights. Statistical significance: *** denotes $p<0.01$, ** $p<0.05$, and * $p<0.1$.

Table 6. Training effects for females aged 16–34, by training length and field, trimmed sample

| | Employment | Wage work | Nonfarm work | Log wage earnings |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| A. *Heterogeneous effects by training type* | | | | |
| Short training courses ($\beta_1$) | 0.057*** | 0.042** | 0.142*** | 0.015 |
| | (0.021) | (0.020) | (0.028) | (0.071) |
| TSLC/tech. dip. programs ($\beta_2$) | 0.041 | 0.023 | 0.153** | -0.009 |
| | (0.062) | (0.042) | (0.078) | (0.123) |
| $\beta_1 = \beta_2$; *p*-value | 0.817 | 0.546 | 0.989 | 0.654 |
| B. *Heterogeneous effects by training field* | | | | |
| Basic computing ($\beta_1$) | 0.014 | 0.042 | 0.103** | 0.136 |
| | (0.028) | (0.027) | (0.044) | (0.105) |
| Dressmaking/tailoring ($\beta_2$) | 0.057* | –0.005 | 0.159*** | –0.058 |
| | (0.032) | (0.029) | (0.039) | (0.128) |
| Other fields ($\beta_3$) | 0.123*** | 0.081*** | 0.186*** | –0.047 |
| | (0.034) | (0.028) | (0.040) | (0.076) |
| $\beta_1 = \beta_2$; *p*-value | 0.271 | 0.223 | 0.312 | 0.218 |
| $\beta_1 = \beta_3$; *p*-value | 0.008 | 0.275 | 0.130 | 0.105 |
| $B_2 = \beta_3$; *p*-value | 0.117 | 0.024 | 0.610 | 0.941 |
| Observations | 5,332 | 2,803 | 2,814 | 622 |

*Source*: Own estimates based on 2008 Nepal Labour Force Survey data.

*Note:* TSLC/tech. dip. programs = Technical School Leaving Certificate/technical diploma programs. Wage work and nonfarm work are conditional on employment, and log wage earnings are conditional on wage work. Employment, wage work, and nonfarm work regressions are estimated as logit based on maximum likelihood, and log wage earnings regressions are estimated based on least squares. All regressions control for the individual's relation to the head of household, age, marital status, current schooling status, education attainment in years, a standardized index of household consumptive assets, and region identifiers. The regressions also control for whether the individual obtained the School Leaving Certificate; which caste he or she belongs to; whether the individual's household has a private benefactor; and whether the individual's household has an absentee member. The propensity-score trimmed sample only includes observations with predicted values between 0.1 and 0.9 in a training-receipt logit regression. Robust standard errors, clustered at the primary sampling unit level, are reported in parentheses. All estimates are adjusted for sampling weights. Statistical significance: *** denotes $p<0.01$, ** $p<0.05$, and * $p<0.1$.

Table 7. Training effects for males aged 16–34, by schooling level and location, trimmed sample

| | Employment | Wage work | Nonfarm work | Log wage earnings |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Training | 0.000 | 0.038 | 0.026 | –0.016 |
| | (0.020) | (0.026) | (0.028) | (0.057) |
| A. *Heterogeneous effects by schooling status* | | | | |
| Training ($\beta_1$) | –0.010 | –0.010 | –0.006 | 0.004 |
| | (0.036) | (0.030) | (0.036) | (0.072) |
| Training×attending school ($\beta_2$) | 0.014 | 0.142*** | 0.084 | –0.061 |
| | (0.043) | (0.051) | (0.052) | (0.113) |
| $\beta_1+\beta_2>0$; *p*–value | 0.839 | 0.002 | 0.046 | 0.520 |
| B. *Heterogeneous effects by education attainment* | | | | |
| Training ($\beta_1$) | –0.065 | 0.021 | –0.043 | 0.065 |
| | (0.064) | (0.059) | (0.073) | (0.147) |
| Training×obtained SLC only ($\beta_2$) | 0.033 | 0.003 | 0.087 | –0.168 |
| | (0.064) | (0.073) | (0.079) | (0.189) |
| Training×intermediate or higher ($\beta_3$) | 0.110 | 0.034 | 0.065 | –0.056 |
| | (0.072) | (0.064) | (0.083) | (0.151) |
| $\beta_1+\beta_2>0$; *p*-value | 0.247 | 0.561 | 0.232 | 0.397 |
| $\beta_1+\beta_3>0$; *p*-value | 0.075 | 0.109 | 0.616 | 0.895 |
| C. *Heterogeneous effects by location* | | | | |
| Training ($\beta_1$) | 0.005 | 0.040 | 0.036 | –0.087 |
| | (0.019) | (0.025) | (0.030) | (0.066) |
| Training×rural ($\beta_2$) | –0.009 | –0.020 | –0.024 | 0.116 |
| | (0.038) | (0.049) | (0.044) | (0.113) |
| $\beta_1+\beta_2>0$; *p*-value | 0.892 | 0.619 | 0.724 | 0.759 |
| Observations | 4,739 | 3,041 | 3,041 | 1,225 |

*Source*: Own estimates based on 2008 Nepal Labour Force Survey data.
*Note:* SLC = School Leaving Certificate. Wage work and nonfarm work are conditional on employment, and log wage earnings are conditional on wage work. Employment, wage work, and nonfarm work regressions are estimated as logit based on maximum likelihood, and log wage earnings regressions are estimated based on least squares. All regressions control for the individual's relation to the head of household, age, marital status, current schooling status, education attainment in years, a standardized index of household consumptive assets, and region identifiers. Regressions also control for whether the individual obtained the School Leaving Certificate; which caste he or she belongs to; whether the individual's household has a private benefactor; and whether the individual's household has an absentee member. The propensity-score trimmed sample only includes observations with predicted values between 0.1 and 0.9 in a training-receipt logit regression. Robust standard errors, clustered at the primary sampling unit level, are reported in parentheses. All estimates are adjusted for sampling weights. Statistical significance: *** denotes $p<0.01$, ** $p<0.05$, and * $p<0.1$.

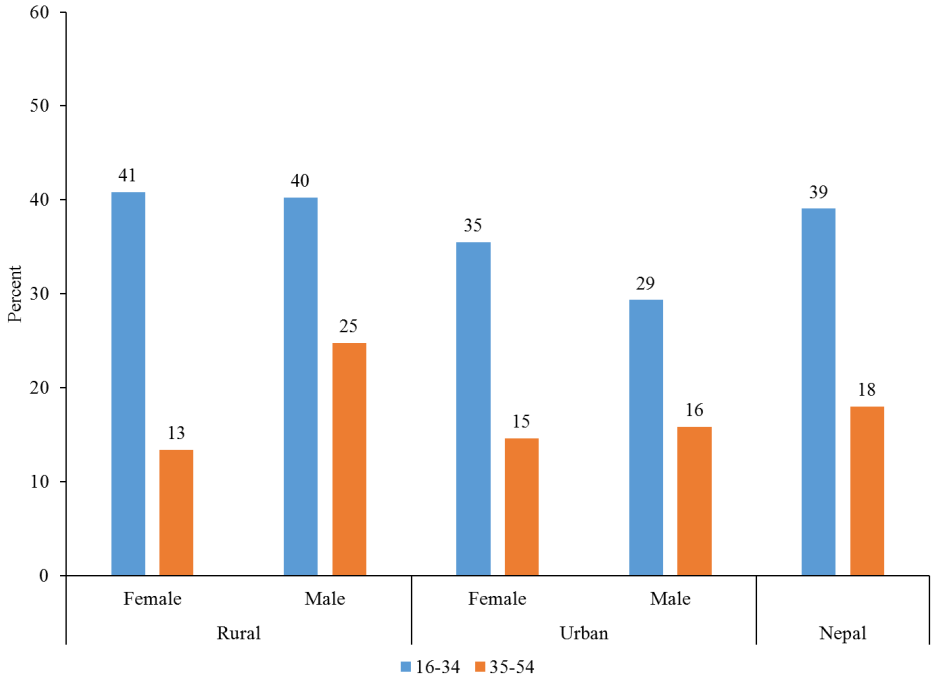
Table 8. Training effects for males aged 16–34, by training length and field, trimmed sample

| | Employment | Wage work | Nonfarm work | Log wage earnings |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| A. *Heterogeneous effects by training type* | | | | |
| Short training courses ($\beta_1$) | –0.013 | 0.050* | 0.004 | –0.037 |
| | (0.021) | (0.030) | (0.032) | (0.061) |
| TSLC/tech. dip. programs ($\beta_2$) | 0.081** | –0.059 | 0.096 | 0.146* |
| | (0.034) | (0.056) | (0.061) | (0.082) |
| $\beta_1 = \beta_2$; *p*-value | 0.045 | 0.032 | 0.423 | 0.370 |
| B. *Heterogeneous effects by training field* | | | | |
| Basic computing ($\beta_1$) | –0.007 | 0.039 | 0.040 | –0.111 |
| | (0.022) | (0.034) | (0.038) | (0.083) |
| Other fields ($\beta_2$) | 0.015 | 0.038 | 0.016 | 0.065 |
| | (0.031) | (0.031) | (0.035) | (0.064) |
| $\beta_1 = \beta_2$; *p*-value | 0.497 | 0.974 | 0.619 | 0.067 |
| Observations | 4,739 | 3,041 | 3,041 | 1,225 |

*Source*: Own estimates using 2008 Nepal Labour Force Survey data.

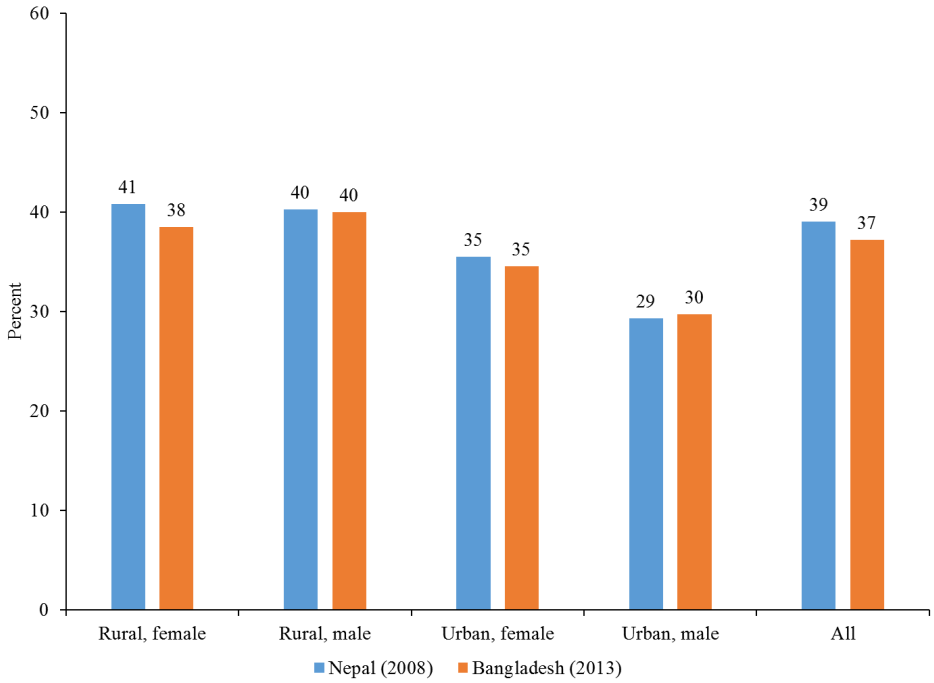
*Note:* TSLC/tech. dip. programs = Technical School Leaving Certificate/technical diploma programs. Wage work and nonfarm work are conditional on employment, and log wage earnings are conditional on wage work. Employment, wage work, and nonfarm work regressions are estimated as logit based on maximum likelihood, and log wage earnings regressions are estimated based on least squares. All regressions control for the individual's relation to the head of household, age, marital status, current schooling status, education attainment in years, a standardized index of household consumptive assets, and region identifiers. The regressions also control for whether the individual obtained the School Leaving Certificate; which caste he or she belongs to; whether the individual's household has a private benefactor; and whether the individual's household has an absentee member. The propensity-score trimmed sample only includes observations with predicted values between 0.1 and 0.9 in a training-receipt logit regression. Robust standard errors, clustered at the primary sampling unit level, are reported in parentheses. All estimates are adjusted for sampling weights. Statistical significance: *** denotes p<0.01, ** p<0.05, and * p<0.1.

Figure 6. Training desire rates, by gender and urban vs. rural



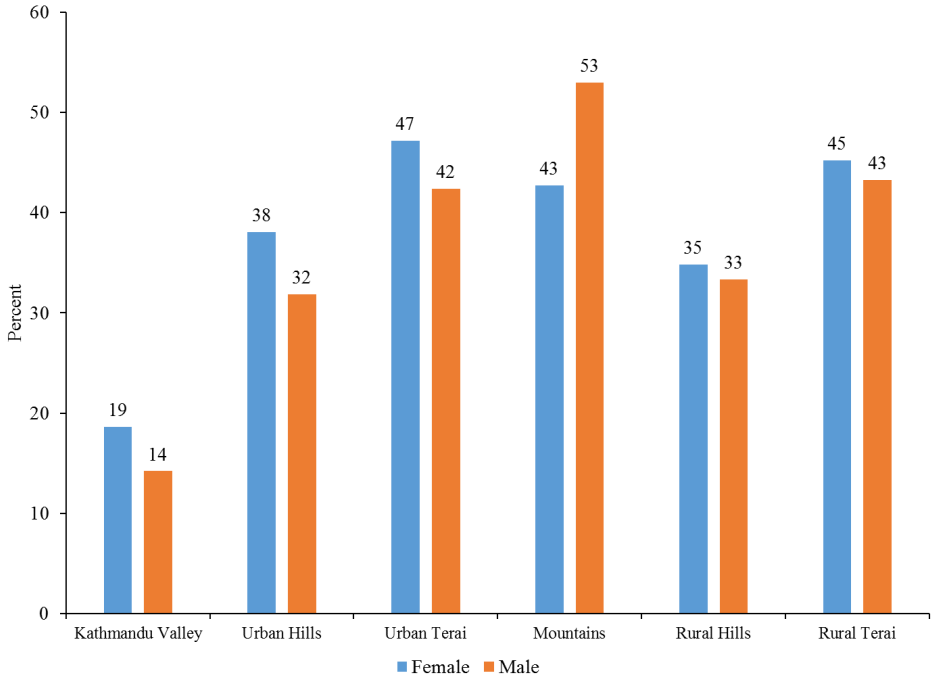

*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates are adjusted for sampling weights.

Figure 7. Training desire rates, Nepal vs. Bangladesh, individuals aged 16–34



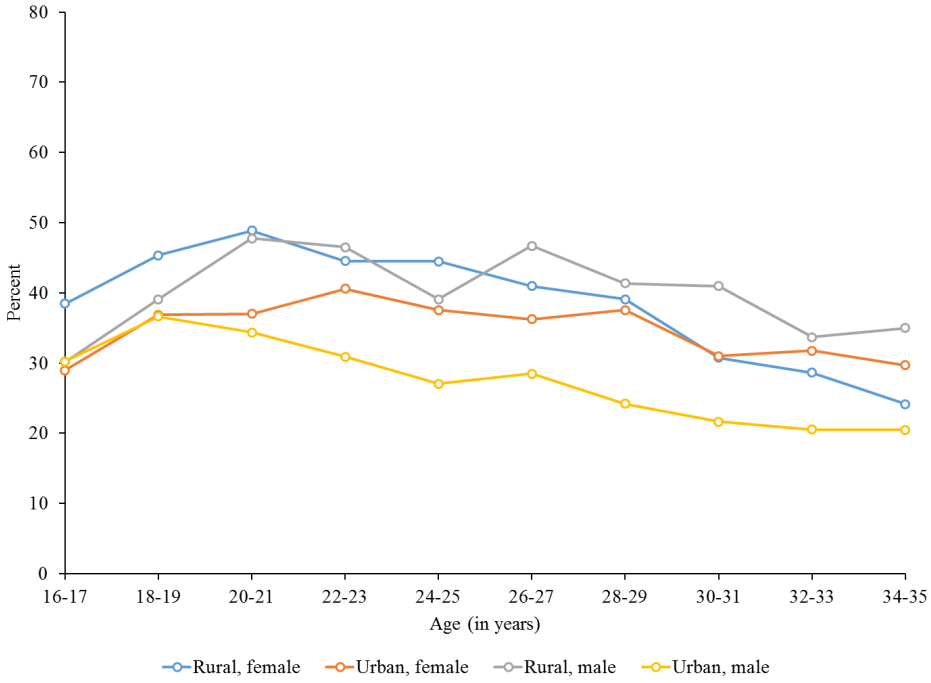

*Source:* Own estimates using data from the 2008 Nepal Labour Force Survey and the 2013 Bangladesh Labour Force Survey.
*Note:* All estimates are adjusted for sampling weights.

Figure 8. Training desire rates, by region, individuals aged 16–34




*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates are adjusted for sampling weights.

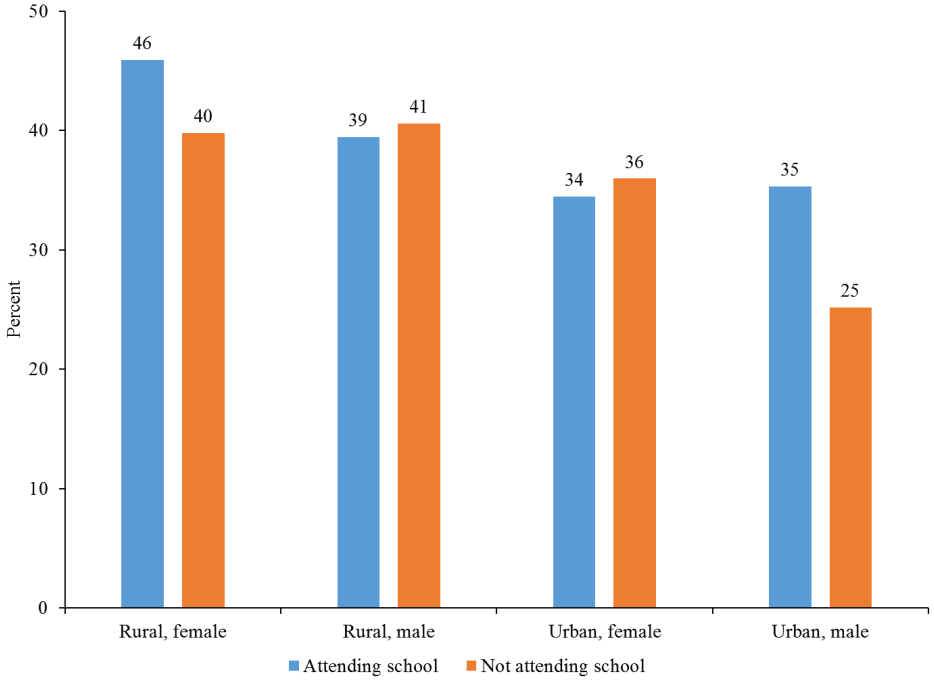
Figure 9. Training desire—age profiles



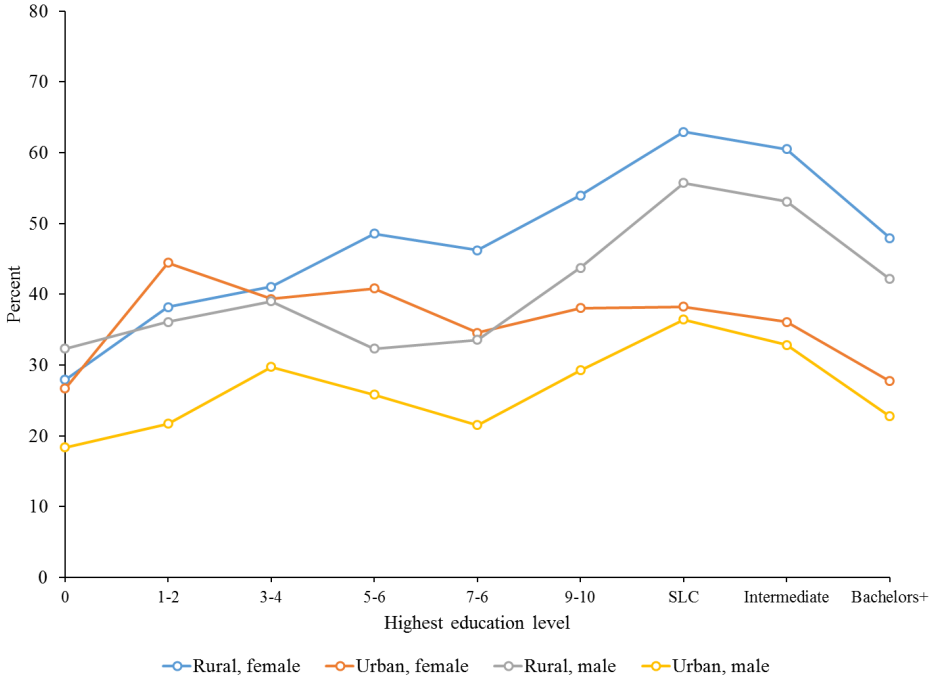

*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates are adjusted for sampling weights.

Figure 10. Training desire—education profiles, individuals aged 16–34

A. *Schooling status*




B. *Education attainment*




*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* SLC = School Leaving Certificate. All estimates are adjusted for sampling weights.

Table 9. Distribution of desired training fields, individuals aged 16–34

| Field | Rural | | Urban | |
|---|---|---|---|---|
| | Female | Male | Female | Male |
| | *In percent* | | | |
| | (1) | (2) | (3) | (4) |
| Teaching | 3 | 3 | 4 | 2 |
| Handicrafts | 2 | 0 | 4 | 0 |
| Business and accounting | 0 | 1 | 1 | 2 |
| Basic computing | 12 | 27 | 26 | 48 |
| Health services | 3 | 1 | 4 | 3 |
| Construction | 0 | 12 | 0 | 7 |
| Dressmaking/tailoring | 64 | 6 | 47 | 3 |
| Small manufacturing and repair | 1 | 13 | 2 | 14 |
| Architecture | 0 | 1 | 0 | 1 |
| Agriculture and livestock management | 12 | 20 | 3 | 4 |
| Driving and motor vehicle operation | 0 | 10 | 0 | 9 |
| Hairdressing/beautician services | 2 | 0 | 8 | 0 |
| Other service fields | 1 | 6 | 2 | 9 |
| Observations | 2,606 | 1,673 | 2,292 | 1,666 |

*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates adjusted for sampling weights.

Table 10. Differences in mean characteristics, those who desire training vs. those who don't, individuals aged 16–34

| Characteristic | Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|---|
| | Female | | Male | | Female | | Male | |
| | Do not desire mean (1) | Desire diff. (2) | Do not desire mean (3) | Desire diff. (4) | Do not desire mean (5) | Desire diff. (6) | Do not desire mean (7) | Desire diff. (8) |
| Rel. to head: Head | 0.406 | –0.044*** | 0.301 | 0.026 | 0.427 | 0.009 | 0.316 | –0.033** |
| Rel. to head: Spouse | 0.302 | –0.055*** | 0.009 | –0.005 | 0.307 | –0.031* | 0.027 | –0.018*** |
| Rel. to head: Son/daughter (in law) | 0.528 | 0.052*** | 0.602 | –0.001 | 0.454 | 0.012 | 0.496 | 0.038 |
| Rel. to head: Grandchild | 0.016 | –0.008** | 0.025 | –0.014*** | 0.022 | –0.008 | 0.018 | 0.000 |
| Rel. to head: Other relative | 0.044 | –0.001 | 0.062 | –0.006 | 0.076 | –0.005 | 0.130 | 0.003 |
| Age | 24.09 | –0.946*** | 23.27 | 0.403** | 24.12 | –0.079 | 24.03 | –1.150*** |
| Married | 0.757 | –0.030** | 0.559 | 0.017 | 0.629 | 0.027 | 0.452 | –0.089*** |
| Born in present VDC/municipality | 0.431 | –0.032** | 0.834 | –0.006 | 0.354 | –0.018 | 0.444 | 0.063** |
| Attending an academic institution | 0.151 | 0.035*** | 0.284 | –0.008 | 0.324 | –0.014 | 0.376 | 0.123*** |
| Education (in years) | 3.292 | 2.079*** | 6.143 | 1.000*** | 7.604 | 0.319 | 9.032 | 0.385** |
| Passed SLC | 0.078 | 0.106*** | 0.174 | 0.132*** | 0.415 | 0.012 | 0.487 | 0.089*** |
| Household has absentee(s) | 0.477 | 0.039*** | 0.315 | 0.021 | 0.286 | 0.076*** | 0.182 | 0.058*** |
| Household has benefactor | 0.033 | 0.019*** | 0.029 | 0.016** | 0.049 | 0.030*** | 0.064 | 0.027** |
| Household asset index | –0.189 | 0.112*** | –0.085 | –0.086* | 1.521 | –0.296*** | 1.623 | –0.380*** |
| Hindu | 0.846 | 0.031* | 0.831 | 0.051*** | 0.834 | 0.060*** | 0.841 | 0.043** |
| Brahmin/Chhetri | 0.277 | 0.100*** | 0.246 | 0.127*** | 0.385 | 0.039* | 0.379 | 0.058** |
| Terai middle castes | 0.119 | –0.001 | 0.143 | –0.016 | 0.060 | 0.031** | 0.083 | 0.024 |
| Dalit | 0.131 | –0.014 | 0.121 | –0.011 | 0.064 | 0.008 | 0.055 | 0.021** |
| Newar | 0.046 | –0.016** | 0.052 | –0.022** | 0.172 | –0.048*** | 0.178 | –0.081*** |
| Janajati | 0.356 | –0.048** | 0.364 | –0.053** | 0.274 | –0.025 | 0.247 | –0.016 |
| Muslim | 0.050 | –0.014 | 0.049 | –0.014 | 0.034 | –0.008 | 0.044 | –0.009 |
| Other castes | 0.021 | –0.005 | 0.025 | –0.011 | 0.012 | 0.003 | 0.014 | 0.002 |
| Got training | 0.034 | 0.079*** | 0.068 | 0.058*** | 0.163 | 0.093*** | 0.178 | 0.123*** |
| Not employed | 0.168 | –0.009 | 0.148 | –0.038*** | 0.515 | –0.062*** | 0.345 | 0.015 |
| Wage employed in agriculture | 0.038 | –0.019*** | 0.062 | –0.024*** | 0.010 | –0.001 | 0.011 | 0.003 |

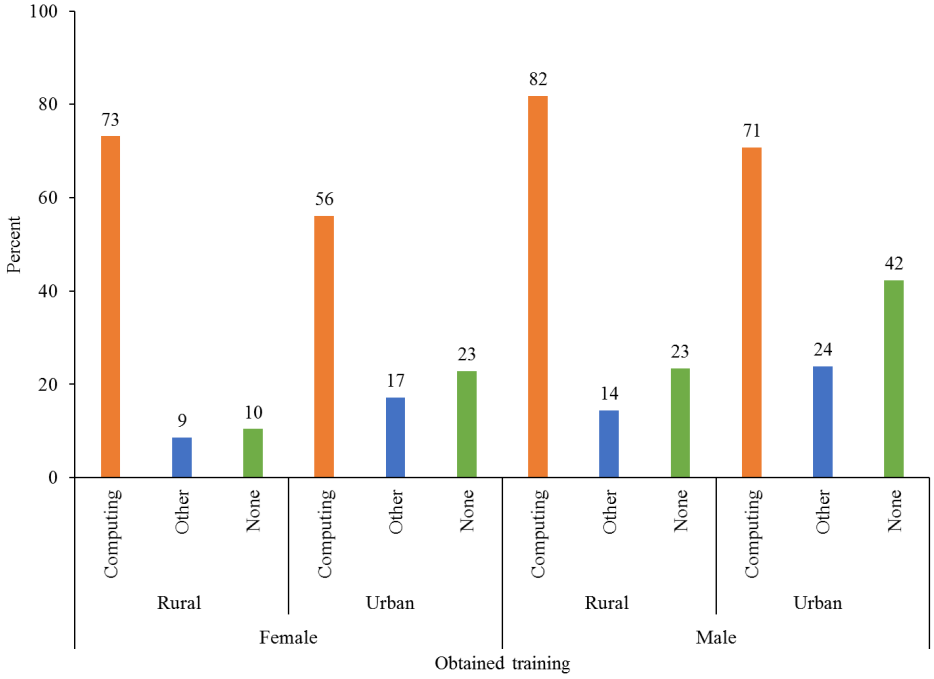
Table 10. Differences in mean characteristics, those who desire training vs. those who don't, individuals aged 16–34

| Characteristic | Rural | | | | Urban | | | |
|---|---|---|---|---|---|---|---|---|
| | Female | | Male | | Female | | Male | |
| | Do not desire mean (1) | Desire diff. (2) | Do not desire mean (3) | Desire diff. (4) | Do not desire mean (5) | Desire diff. (6) | Do not desire mean (7) | Desire diff. (8) |
| Wage employed in industry | 0.011 | 0.002 | 0.098 | –0.016 | 0.028 | –0.004 | 0.123 | –0.018* |
| Wage employed in services | 0.013 | 0.022*** | 0.092 | –0.001 | 0.100 | –0.016 | 0.231 | –0.046** |
| Self employed in agriculture | 0.686 | –0.029 | 0.479 | 0.081*** | 0.172 | 0.083*** | 0.066 | 0.061*** |
| Self employed in industry | 0.019 | 0.022*** | 0.035 | 0.003 | 0.033 | 0.005 | 0.045 | –0.010 |
| Self employed in services | 0.066 | 0.010 | 0.089 | –0.005 | 0.143 | –0.007 | 0.180 | –0.005 |
| Kathmandu Valley | — | — | — | — | 0.424 | –0.247*** | 0.489 | –0.290*** |
| Urban Terai | — | — | — | — | 0.348 | 0.219*** | 0.329 | 0.264*** |
| Urban Hills | — | — | — | — | 0.228 | 0.027 | 0.182 | 0.027 |
| Rural Terai | 0.471 | 0.095*** | 0.501 | 0.069** | — | — | — | — |
| Rural Hills | 0.456 | –0.101*** | 0.437 | –0.111*** | — | — | — | — |
| Mountains | 0.073 | 0.006 | 0.062 | 0.042** | — | — | — | — |

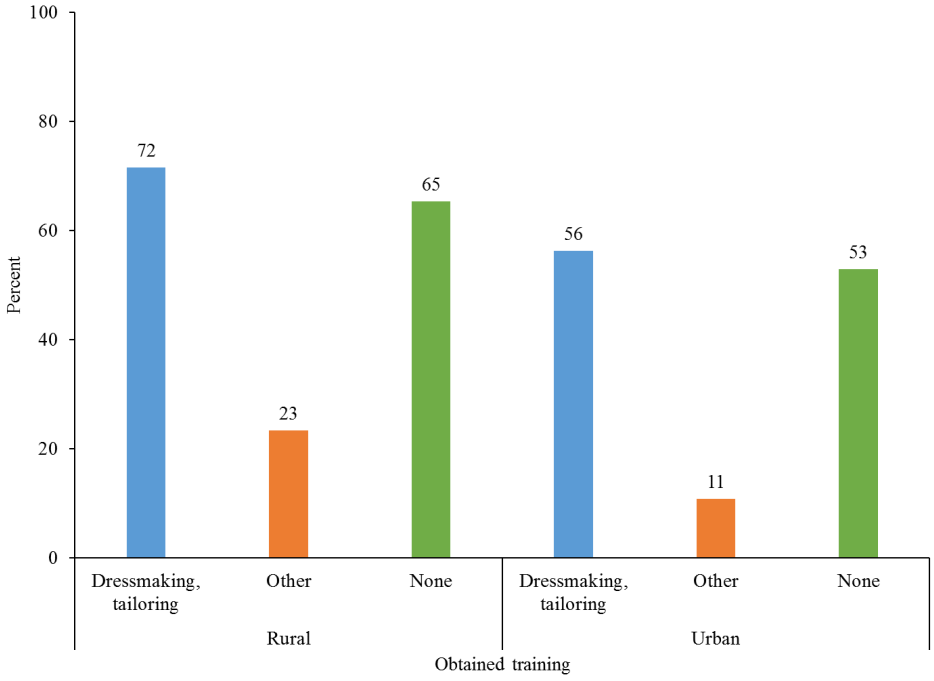
*Source*: Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* — = Not applicable; SLC = School Leaving Certificate; VDC = Village Development Committee. Inference is based on robust standard errors clustered at the primary sampling unit level. All estimates adjusted for sampling weights. Statistical significance: *** p<0.01, ** p<0.05, * p<0.1.

Figure 12. Desire for training in selected fields, conditional on obtained training status, individuals aged 16–34

A. *Desire training in computing*



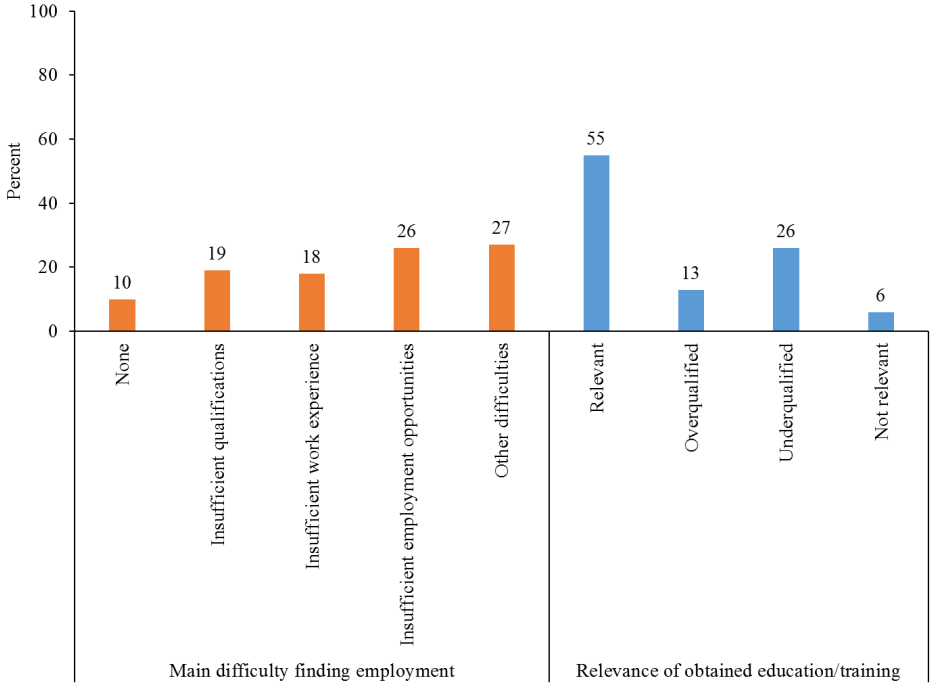

B. *Desire training in tailoring/dressmaking, women only*



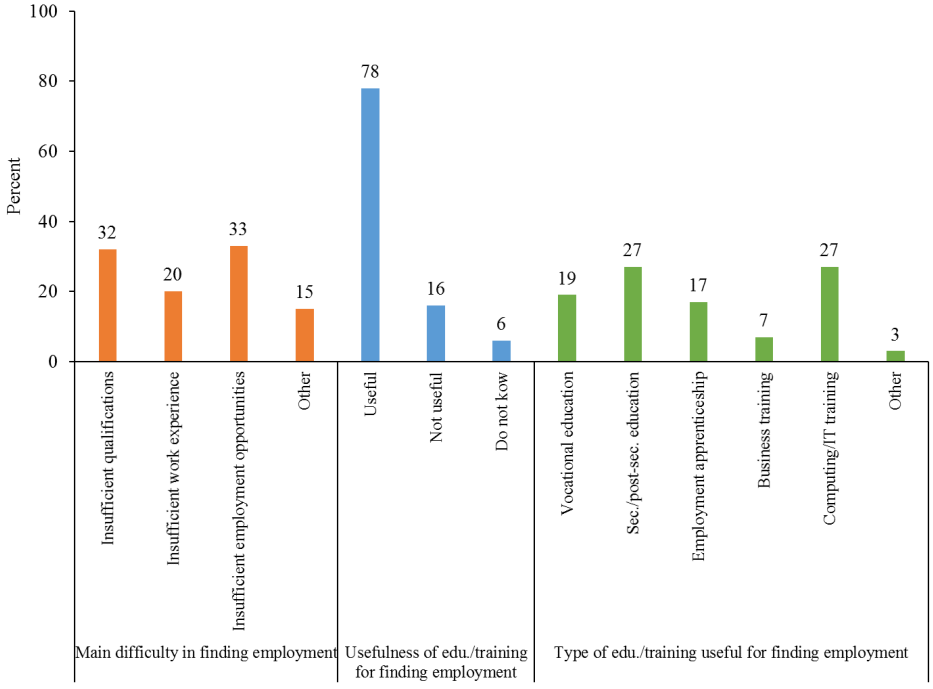

*Source:* Own estimates using 2008 Nepal Labour Force Survey data.
*Note:* All estimates adjusted for sampling weights.

Figure 13. Perceptions on education and training, individuals aged 16–29

A. *Employed workers*




B. *Unemployed workers*




*Source:* Own estimates using 2013 Nepal School-to-Work Transition Survey data.
*Note:* Employed workers are defined as those who are engaged in an economic activity for at least one hour in the last week. Unemployed workers are defined as those who are not employed, are available for work in the last week, and actively looked for work in the last month. All estimates adjusted for sampling weights.

## Appendix

Table A1. Differences in mean characteristics, training recipients vs. nonrecipients, full vs. trimmed sample, individuals aged 16–34

| Characteristic | Female | | | | Male | | | |
|---|---|---|---|---|---|---|---|---|
| | Full sample | | Trimmed sample | | Full sample | | Trimmed sample | |
| | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Rel. to head: Head | 0.396 | –0.019 | 0.356 | –0.005 | 0.308 | 0.014 | 0.294 | –0.012 |
| Rel. to head: Spouse | 0.286 | –0.046*** | 0.220 | –0.019 | 0.010 | 0.005 | 0.016 | –0.003 |
| Rel. to head: Son/daughter (in law) | 0.533 | 0.004 | 0.554 | 0.008 | 0.587 | –0.056*** | 0.554 | 0.008 |
| Rel. to head: Grandchild | 0.014 | 0.002 | 0.014 | 0.006 | 0.019 | 0.004 | 0.021 | 0.003 |
| Rel. to head: Other relative | 0.049 | 0.009 | 0.061 | 0.000 | 0.072 | 0.032** | 0.108 | 0.002 |
| Age | 23.72 | 0.558*** | 23.80 | 0.346 | 23.37 | 1.000*** | 24.13 | –0.069 |
| Married | 0.736 | –0.123*** | 0.594 | –0.043* | 0.540 | –0.067*** | 0.458 | –0.059** |
| Born in present VDC/municipality | 0.406 | 0.000 | 0.390 | 0.025 | 0.769 | –0.175*** | 0.591 | –0.036 |
| Attending an academic institution | 0.182 | 0.122*** | 0.352 | 0.020 | 0.298 | 0.118*** | 0.458 | 0.058** |
| Highest class/degree completed (in years) | 4.346 | 4.672*** | 9.907 | 0.646*** | 6.748 | 3.464*** | 10.754 | 0.672*** |
| Obtained the SLC | 0.138 | 0.395*** | 0.581 | 0.140*** | 0.241 | 0.454*** | 0.829 | 0.084*** |
| Household has absentee(s) | 0.463 | –0.018 | 0.453 | 0.007 | 0.300 | –0.034* | 0.283 | –0.032 |
| Household has benefactor | 0.041 | 0.032*** | 0.075 | 0.002 | 0.039 | 0.047*** | 0.066 | 0.042*** |
| Household asset index | 0.035 | 1.027*** | 1.141 | 0.314*** | 0.136 | 0.953*** | 1.083 | 0.301*** |
| Hindu | 0.854 | 0.040*** | 0.899 | 0.014 | 0.848 | 0.039*** | 0.901 | –0.005 |
| Brahmin/Chhetri | 0.316 | 0.164*** | 0.523 | 0.021 | 0.303 | 0.149*** | 0.483 | 0.025 |
| Terai middle castes | 0.114 | –0.051*** | 0.059 | –0.007 | 0.131 | –0.042*** | 0.091 | –0.000 |
| Dalit | 0.121 | –0.067*** | 0.035 | –0.004 | 0.111 | –0.065*** | 0.039 | –0.018* |
| Newar | 0.052 | 0.084*** | 0.128 | 0.035** | 0.061 | 0.051*** | 0.121 | 0.009 |
| Janajati | 0.331 | –0.083*** | 0.244 | –0.047** | 0.329 | –0.067*** | 0.239 | –0.021 |
| Muslim | 0.045 | –0.035*** | 0.006 | 0.001 | 0.043 | –0.020*** | 0.017 | 0.003 |
| Other castes | 0.019 | –0.013*** | 0.004 | 0.000 | 0.020 | –0.007 | 0.010 | 0.001 |
| Kathmandu Valley | 0.049 | 0.091*** | 0.144 | 0.032* | 0.078 | 0.103*** | 0.180 | 0.028* |

Table A1. Differences in mean characteristics, training recipients vs. nonrecipients, full vs. trimmed sample, individuals aged 16–34

| Characteristic | Female | | | | Male | | | |
|---|---|---|---|---|---|---|---|---|
| | Full sample | | Trimmed sample | | Full sample | | Trimmed sample | |
| | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. | Nonrecipients mean | Recipients diff. |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Urban Terai | 0.066 | 0.080*** | 0.137 | 0.033** | 0.084 | 0.061*** | 0.138 | 0.025* |
| Urban Hills | 0.035 | 0.063*** | 0.094 | 0.031** | 0.036 | 0.056*** | 0.083 | 0.031*** |
| Rural Terai | 0.431 | –0.095*** | 0.342 | –0.020 | 0.420 | –0.093*** | 0.316 | –0.006 |
| Rural Hills | 0.353 | –0.108*** | 0.250 | –0.065*** | 0.318 | –0.101*** | 0.236 | –0.063*** |
| Mountains | 0.065 | –0.031*** | 0.033 | –0.011* | 0.064 | –0.025** | 0.048 | –0.016 |

*Source*: Own estimates using 2008 Nepal Labour Force Survey data.

*Note:* SLC = School Leaving Certificate. VDC = Village Development Committee. Columns (1), (3), (5), and (7) report means for training nonrecipients; Columns (2), (4), (6), and (8) report the difference in means between recipients and nonrecipients. The trimmed sample only includes observations with predicted values between 0.1 and 0.9 from a training-receipt logit regression. The training-receipt regressions were estimated separately by gender. Inference based on robust standard errors clustered at the primary sampling unit level. All estimates are adjusted for sampling weights. Statistical significance: *** denotes $p<0.01$, ** $p<0.05$, and * $p<0.1$.

Table A2. Training effects for females aged 16-34, overall, and by schooling level and location, full sample

| | Employment | Wage work | Nonfarm work | Log wage earnings |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Training | 0.044*** | 0.027** | 0.105*** | –0.033 |
| | (0.014) | (0.011) | (0.016) | (0.066) |
| A. *Heterogeneous effects by schooling status* | | | | |
| Training ($\beta_1$) | 0.061*** | 0.016 | 0.106*** | –0.105 |
| | (0.017) | (0.013) | (0.017) | (0.077) |
| Training×attending school ($\beta_2$) | –0.047* | 0.046** | –0.009 | 0.231 |
| | (0.024) | (0.023) | (0.033) | (0.142) |
| $\beta_1+\beta_2>0$; *p*–value | 0.491 | 0.003 | 0.001 | 0.308 |
| B. *Heterogeneous effects by education attainment* | | | | |
| Training ($\beta_1$) | 0.024 | 0.023 | 0.120*** | –0.057 |
| | (0.020) | (0.016) | (0.018) | (0.109) |
| Training×obtained the SLC only ($\beta_2$) | 0.025 | 0.017 | 0.003 | 0.102 |
| | (0.030) | (0.027) | (0.033) | (0.180) |
| Training×intermediate or higher ($\beta_3$) | 0.046 | –0.024 | –0.104*** | 0.009 |
| | (0.030) | (0.025) | (0.040) | (0.145) |
| $\beta_1+\beta_2>0$; *p*-value | 0.038 | 0.058 | 0.000 | 0.769 |
| $\beta_1+\beta_3>0$; *p*-value | 0.002 | 0.990 | 0.685 | 0.595 |
| C. *Heterogeneous effects by location* | | | | |
| Training ($\beta_1$) | 0.056*** | 0.025* | 0.081*** | –0.062 |
| | (0.013) | (0.015) | (0.018) | (0.063) |
| Training×rural ($\beta_2$) | –0.027 | 0.002 | 0.031 | 0.042 |
| | (0.024) | (0.020) | (0.025) | (0.119) |
| $\beta_1+\beta_2>0$; *p*-value | 0.179 | 0.058 | 0.000 | 0.851 |
| Observations | 13,184 | 8,907 | 8,907 | 1,098 |

*Source*: Own estimates using 2008 Nepal Labour Force Survey data.

*Note:* SLC = School Leaving Certificate. Wage work and nonfarm work are conditional on employment, and log wage earnings are conditional on wage work. Employment, wage work, and nonfarm work regressions are estimated as logit based on maximum likelihood, and log wage earnings regressions are estimated based on least squares. All regressions control for the individual's relation to the head of household, age, marital status, current schooling status, education attainment in years, a standardized index of household consumptive assets, and region identifiers. The regressions also control for whether the individual obtained the School Leaving Certificate; which caste he or she belongs to; whether the individual's household has a private benefactor; and whether the individual's household has an absentee member. Robust standard errors, clustered at the primary sampling unit level, are reported in parentheses. All estimates are adjusted for sampling weights. Statistical significance: *** denotes $p<0.01$, ** $p<0.05$, and * $p<0.1$.

Table A3. Training effects for females aged 16–34, by training length and field, full sample

| | Employment | Wage work | Nonfarm work | Log wage earnings |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| A. *Heterogeneous effects by training program length* | | | | |
| Short training courses ($\beta_1$) | 0.041*** | 0.026** | 0.098*** | –0.022 |
| | (0.015) | (0.012) | (0.016) | (0.071) |
| TSLC/tech. dip. programs ($\beta_2$) | 0.035 | 0.007 | 0.097* | –0.090 |
| | (0.046) | (0.026) | (0.053) | (0.106) |
| $\beta_1 = \beta_2$; $p$-value | 0.903 | 0.719 | 0.902 | 0.888 |
| B. *Heterogeneous effects by training field* | | | | |
| Basic computing ($\beta_1$) | 0.010 | 0.045** | 0.062* | 0.136 |
| | (0.022) | (0.018) | (0.032) | (0.104) |
| Dressmaking/tailoring ($\beta_2$) | 0.040* | –0.016 | 0.104*** | –0.155 |
| | (0.021) | (0.018) | (0.021) | (0.130) |
| Other fields ($\beta_3$) | 0.086*** | 0.054*** | 0.123*** | –0.070 |
| | (0.022) | (0.017) | (0.024) | (0.083) |
| $\beta_1 = \beta_2$; $p$-value | 0.271 | 0.013 | 0.247 | 0.065 |
| $\beta_1 = \beta_3$; $p$-value | 0.008 | 0.672 | 0.097 | 0.059 |
| $B_2 = \beta_3$; $p$-value | 0.117 | 0.003 | 0.550 | 0.589 |
| Observations | 13,184 | 8,907 | 8,907 | 1,098 |

*Source*: Own estimates using 2008 Nepal Labour Force Survey data.

*Note:* TSLC/tech. dip. programs = Technical School Leaving Certificate/technical diploma programs. Wage work and nonfarm work are conditional on employment, and log wage earnings are conditional on wage work. Employment, wage work, and nonfarm work regressions are estimated as logit based on maximum likelihood, and log wage earnings regressions are estimated based on least squares. All regressions control for the individual's relation to the head of household, age, marital status, current schooling status, education attainment in years, a standardized index of household consumptive assets, and region identifiers. The regressions also control for whether the individual obtained the School Leaving Certificate; which caste he or she belongs to; whether the individual's household has a private benefactor; and whether the individual's household has an absentee member. Robust standard errors, clustered at the primary sampling unit level, are reported in parentheses. All estimates are adjusted for sampling weights. Statistical significance: *** denotes $p<0.01$, ** $p<0.05$, and * $p<0.1$.

Table A4. Training effects for males aged 16-34, overall, and by schooling level and location, full sample

| | Employment | Wage work | Nonfarm work | Log wage earnings |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| Training | –0.009 | 0.082*** | 0.070*** | 0.046 |
| | (0.012) | (0.022) | (0.024) | (0.047) |
| A. *Heterogeneous effects by schooling status* | | | | |
| Training ($\beta_1$) | –0.009 | 0.042* | 0.054* | 0.035 |
| | (0.019) | (0.023) | (0.028) | (0.054) |
| Training×attending school ($\beta_2$) | 0.000 | 0.175*** | 0.062 | 0.054 |
| | (0.024) | (0.044) | (0.049) | (0.108) |
| $\beta_1+\beta_2>0$; *p*–value | 0.587 | 0.000 | 0.005 | 0.350 |
| B. *Heterogeneous effects by education attainment* | | | | |
| Training ($\beta_1$) | –0.044* | 0.098*** | 0.101*** | 0.082 |
| | (0.023) | (0.030) | (0.035) | (0.065) |
| Training×obtained the SLC only ($\beta_2$) | 0.016 | –0.090* | –0.058 | –0.135 |
| | (0.030) | (0.050) | (0.053) | (0.140) |
| Training×intermediate or higher ($\beta_3$) | 0.083*** | –0.063 | –0.094 | –0.078 |
| | (0.029) | (0.048) | (0.064) | (0.091) |
| $\beta_1+\beta_2>0$; *p*-value | 0.147 | 0.032 | 0.000 | 0.520 |
| $\beta_1+\beta_3>0$; *p*-value | 0.037 | 0.381 | 0.897 | 0.959 |
| C. *Heterogeneous effects by location* | | | | |
| Training ($\beta_1$) | 0.002 | 0.087*** | 0.054* | –0.013 |
| | (0.010) | (0.026) | (0.029) | (0.059) |
| Training×rural ($\beta_2$) | –0.023 | –0.003 | 0.019 | 0.073 |
| | (0.022) | (0.038) | (0.039) | (0.087) |
| $\beta_1+\beta_2>0$; *p*-value | 0.309 | 0.004 | 0.008 | 0.382 |
| Observations | 10,100 | 7,568 | 7,568 | 2,652 |

*Source*: Own estimates using 2008 Nepal Labour Force Survey data.

*Note:* SLC = School Leaving Certificate. Wage work and nonfarm work are conditional on employment, and log wage earnings are conditional on wage work. Employment, wage work, and nonfarm work regressions are estimated as logit based on maximum likelihood, and log wage earnings regressions are estimated based on least squares. All regressions control for the individual's relation to the head of household, age, marital status, current schooling status, education attainment in years, a standardized index of household consumptive assets, and region identifiers. The regressions also control for whether the individual obtained the School Leaving Certificate; which caste he or she belongs to; whether the individual's household has a private benefactor; and whether the individual's household has an absentee member. Robust standard errors, clustered at the primary sampling unit level, are reported in parentheses. All estimates are adjusted for sampling weights. Statistical significance: *** denotes $p<0.01$, ** $p<0.05$, and * $p<0.1$.

Table A5. Training effects for males aged 16–34, by training length and field, full sample

| | Employment | Wage work | Nonfarm work | Log wage earnings |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| A. *Heterogeneous effects by training program type* | | | | |
| Short training courses ($\beta_1$) | –0.016 | 0.090*** | 0.052** | 0.028 |
| | (0.013) | (0.023) | (0.026) | (0.048) |
| TSLC/tech. dip. programs ($\beta_2$) | 0.051* | –0.047 | 0.115* | 0.149 |
| | (0.027) | (0.052) | (0.065) | (0.116) |
| $\beta_1 = \beta_2$; $p$-value | 0.041 | 0.150 | 0.256 | 0.141 |
| B. *Heterogeneous effects by training field* | | | | |
| Basic computing ($\beta_1$) | –0.014 | 0.099*** | 0.051 | 0.011 |
| | (0.015) | (0.033) | (0.038) | (0.088) |
| Other fields ($\beta_2$) | –0.001 | 0.074*** | 0.077*** | 0.060 |
| | (0.018) | (0.024) | (0.029) | (0.051) |
| $\beta_1 = \beta_2$; $p$-value | 0.560 | 0.486 | 0.565 | 0.616 |
| Observations | 10,100 | 7,568 | 7,568 | 2,652 |

*Source*: Own estimates using 2008 Nepal Labour Force Survey data.

*Note:* TSLC/tech. dip. programs = Technical School Leaving Certificate/technical diploma programs. Wage work and nonfarm work are conditional on employment, and log wage earnings are conditional on wage work. Employment, wage work, and nonfarm work regressions are estimated as logit based on maximum likelihood, and log wage earnings regressions are estimated based on least squares. All regressions control for the individual's relation to the head of household, age, marital status, current schooling status, education attainment in years, a standardized index of household consumptive assets, and region identifiers. The regressions also control for whether the individual obtained the School Leaving Certificate; which caste he or she belongs to; whether the individual's household has a private benefactor; and whether the individual's household has an absentee member. Robust standard errors, clustered at the primary sampling unit level, are reported in parentheses. All estimates are adjusted for sampling weights. Statistical significance: *** denotes $p<0.01$, ** $p<0.05$, and * $p<0.1$.

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