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Impact of Attending Training Programs on Income: An Analysis Using Bangladesh Quarterly Labour Force Survey 2015-2016

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Abstract

This study investigates the impact of attending vocational training programs on income, focusing special attention on the youths. Using data from the Bangladesh Quarterly Labour Force Survey (2015-2016), it investigates the relationship between training program participation and monthly income in a multivariate setting. Separate analyses were performed for respondents of two age groups, 15 to 65 years and 18 to 35 years, using the Ordinary Least Square technique. A significant and positive impact of training participation on income was found for both groups. The estimated results show an average young person attending training programs earn US$34.78 (Tk 2,949) more per month compared with those not attending such training. The estimated results were found robust in the sensitivity analyses using different subsamples of study respondents.

Keywords: Training; Income; Youth; Young; Labour market.

Introduction

Youths matter and deserve attention for multiple reasons, with the main reason being their share in the world population that includes about 1.8 billion people, aged between 10 and 24 years (Gupta et al., 2014). About 90% of this population lives in the underdeveloped countries. In the South Asia region, India tops the list, with a total of 356 million young people falling in the 18-24 age range. China occupies the second position with 269 million young, while Pakistan and Bangladesh are the homes of 59 and 48 million young people, respectively (Gupta et al., 2014). Therefore, without empowering such a large proportion of the world population imagining an efficient world workforce is next to impossible. Nevertheless, youths are ignored in many countries, especially the underdeveloped ones. The poor economic conditions and inadequate education opportunities in this part of the world make it difficult for the youths to reach the full potential.

As per the national youth policy 2017 of Bangladesh, people aged between 18 and 35 are young, constituting about one third of country's youth population (*Department of Youth Development*, 2017). As Table 1 shows about 50.7 million people in Bangladesh are aged between 18 and 35 years, while 50% of them are unemployed, 55% are uneducated, and around 75% live in the rural areas.

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Table 1: Youth Profile of Bangladesh

Total population	152 million
Unemployed youth population	22.8 million
Youth population	50.7 million
Educated youth population	27.9 million
Rural youth population	37.0 million

Source: Department of Youth Development's Official Website (2018)

Considering that the formulation and implementation of effective development programs can contribute to an enhancement of the required skills for the young, many initiatives were taken in the past. The government has been continuously focusing on the capacity building of the youths through multifarious programs since independence, including those concentrating on vocational training. Private, non-government, and foreign organizations have also played an important role in imparting training to the targeted population. Having a good understanding of the effectiveness of the launched training programs is crucial, as they involve a lot of scarce financial resources, especially for developing countries. However, while the previous studies conducted in Bangladesh evaluated the effectiveness of specific training programs, no study looked at possible impact of training on income using data from a nationally representative survey. A second contribution of this study is performing an analysis in a multivariate setting, circumventing limitations faced by the previous studies that were mostly descriptive. The rest of this paper is organized as follows. The next section provides a short description of the development initiatives taken for the young people by the Government of Bangladesh. Then we review selected studies from the relevant literature. The subsequent section presents the methodology of the analysis, while the next two sections contain results and discussion, respectively. The final section concludes.

Youth development initiatives in Bangladesh

To develop a smooth transition system of country's youth to the labour force, the government has been emphasizing on skill development and engagement in development work for the young people since 1970s. To this end, the Ministry of Youth Development was established in 1978 which was later expanded with an intention to increase its scope of operation and assumed the name Ministry of Youth and Sports. A separate division called Department of Youth Development (DYD) under this ministry was established in 1981 to implement the youth development programs at the field level. DYD uses its countrywide network encompassing regional offices in all 64 districts and 476 sub-districts (upazillas) of Bangladesh. The government currently operates 60 institutional training centers under DYD across the country. The objective is to make the young people skilled enough such that they can contribute to the development of the country to the highest level of their potential. DYD has implemented many youth-focused programs since its inception and has helped numerous unemployed young to become self-employed and to secure jobs, eventually turning them into valuable members of the labour force. Many of those who received training from this department are successfully working abroad as well, contributing to the country's huge remittance inflow. Following is a list of the youth development programs in Bangladesh that have

been designed to provide the unemployed young with the proper instructions, knowledge, skill, and support required to propel them forward.

1) Skill Enhancement Training Program for the Unemployed Youth
2) Self-Employment Program for the Trained Youth
3) Youth Credit Program
4) Motivation and Awareness Enhancing Program
5) Public Private Partnership Program
6) National Service Program
7) Club Enlistment and Grant-in-Aid
8) Commonwealth Youth Program
9) Commonwealth and SAARC Youth Awards
10) Cooperation with International Agencies

Table 2: Youth development activities from 1981 to 2013

No. of trained youths	4,112,490
No. of self-employed youths	2,002,436
Amount of starting credit fund	Tk.1,661 million
Amount of loan disbursed	Tk.12,135 million
No. of beneficiaries	805,260
No. of youth organizations	16,197
No. of grant recipient youth organizations	10,627
Amount of grant disbursed	Tk.115 million
No. of employed under national service program	69,804
No. of national youth award recipients	315

Source: Department of Youth Development's Official Website (2018)

Table 2 above presents recent development activities of the GoB. In a period of 32 years, from 1981 to 2013, the government provided 4,112,490 young with various types of training throughout the country while helping 2,002,436 unemployed young to become self-employed. DYD started its operation with a credit fund of Tk.1,661 million, and about Tk.12,135 million of credit was disbursed to the young till 2013. About 805,260 unemployed received microcredit that helped them start their own enterprises. Between 1981 and 2013, Tk.115 million was disbursed as grants among 16,197 youth organizations. In total, 69,804 unemployed young were given temporary jobs under the national service program.

Literature review

The literature on youth development programs and their effects on labour-market outcomes can be divided into multiple strands based on the types of programs commonly undertaken in different parts of the world. One strand includes studies investigating the relationship between microcredit provided to unemployed young and savings and investment. Ondoro & Omena (2012) studied the effects of microfinance services on savings, investment, and financial management skills of youth in Kenya, using primary data collected from 339 youth groups and 545 individuals receiving microcredit from the Kenya Youth Enterprise Development Fund. While the study failed to find a statistically significant

relationship between access to microcredit and savings and investment, it showed that microfinance services and financial management are positively related. These findings are consistent with those of Wright et al. (1999). Littlefield et al. (2003) also showed that micro-financing positively influences savings and investments.

Several studies looked at the effectiveness of programs designed to increase life skills, including creating awareness and providing knowledge about risky health behaviour. Bandiera et al. (2012) conducted a randomized controlled trial on adolescent girls in Uganda taking two factors into consideration, health challenges associated with unaware sex that might lead to various diseases and challenges associated with smooth transition to labour market. To this end, they examined the effects of a program that includes both life-skill training required for safe health behaviour and vocational training that can enable girls to start and operate enterprises. The study showed vocational training increases the probability of engagement in employment for adolescent girls by 35%. On the contrary, the life-skill training was found to significantly increase participants' income and knowledge about safe sex and HIV. Tautz (2011), studying Ethiopia and Kenyan girls, also found a positive correlation between life-skill enhancement initiative and income. A similar training led to an increase in income in Dominican Republic (Ibarraran et al., 2014). Bandiera et al. (2017), in another randomized controlled trial on young women of Uganda, found that a vocational training in which women were kept separate from men and were given the opportunity to interact and share ideas of risky health behaviour among themselves decreases the proportion of young women experiencing forced sex by 50%. It was found that participation in the vocational training reduces teenage pregnancy rates and early marriage or cohabitation by 26 and 58 percentage points, respectively. An association between receiving training and increase in income was also found.

Another branch of literature includes studies focusing on the labour market effects of vocational training and education. Chakravarty et al. (2019), using a "fuzzy" regression discontinuity design, examined the labour-market effects of a vocational training program in Nepal over a period of three years. Their findings suggests that receiving training leads to an employment increase of 28 percentage points in the non-farm sector and of 95 percentage points overall. Participation in training program increased the monthly income by US$29 on an average, a 171% increase compared with the previous level. A recent study by Maitra & Mani (2017) evaluated the effects of a stitching and tailoring training program for the women living in the slum areas of New Delhi in a quasi-experimental setting. They found that program participation increased the probability of wage employment, self-employment, and any employment by 5, 4, and 6 percentage points, respectively. It also found that hours worked increased by 2.5 during the post-training period. Using a sample of randomly selected individuals in the Dominican Republic, Card et al. (2011) found limited indications of positive effects on employment and a moderate effect on income 10 to 14 months after the completion of a training program. Chakravorty & Bedi (2019) also find a positive relationship between participating in training programs and increase in employment rates. The literature on

training programs evaluation includes some randomized trials as well. A randomized trial in Columbia conducted by Attanasio et al. (2011) found training program to positively affect paid employment. They also found that the impact on income is large and positive; it led to a 12 to 15 percent increase in paid employment in comparison with the mean of the control group. Betcherman et al. (2004) systematically reviewed 69 impact evaluations of training program, showing that the effects of training in Latin America are more positive than those found in Europe and the United States, on an average. Very few studies use nationally representative survey data to analyze the impact of attending training program on various labour market outcomes. Kumar, Mandava, and Gopanapalli (2019), using National Sample Survey Office (NSSO) data, finds receiving training increases leads to a 4.7% increase in wage in the economy in comparison with individuals without training. As long as Bangladesh is concerned no single study uses a nationally representative dataset to explore the labour market effects of training. Alam (2008) studied the role of technical and vocational education (TVE) of Bangladesh in its national development. He concluded that TVE is unorganized, and although the country utilized considerable educational resources, it is yet to achieve efficiency in the education sector. A recent study by Das (2021), in a randomized controlled trial setting, investigates the estimated effects of training program participation on labour market outcomes. This study uses data from a survey implemented by BRAC-RED that interviews respondents belonging to the branch offices of BRAC.

Methodology

Data

This study used data from the Quarterly Labour Force Survey (QLFS) 2015-2016, a nationwide survey conducted from July 2015 to June 2016 by Bangladesh Bureau of Statistics (BBS). QLFS, being the first ever labour force survey in the country, provides annual and as well as quarterly estimates of different labour market statistics at the national, urban, and rural levels. The survey sampling frame comprised the enumeration areas (EAs) that were used in the 2011 national census of Bangladesh. The EAs geographically covered the whole of the country and formed the basis for the Primary Sampling Unit (PSU) for the survey, with each PSU including, on an average, 225 households. The QLFS 2015 followed a two-stage stratified random sampling design while collecting the data. The first stage randomly selected a total of 1,284 PSUs based on 138 strata coming from 10 city corporations and urban and rural areas of 64 districts. In the second stage, 24 households were again randomly selected from each PSU. The survey interviewed 30,816 households from the selected rural and urban PSUs every quarter, covering 128,000 households in the whole year of 2015-2016. This study combined data from all four survey quarters, treating as a cross-section.

Sample and variables

We restricted the sample to people aged between 15 and 65 years, as training-related questions were asked from respondents falling in this age group. The outcome variable of interest of this analysis is *income*, a continuous variable, representing monthly cash

income in Bangladesh Taka (Tk) received from the main work or job held by the respondent. The policy variable of interest is *training*, a dummy variable that assumes a value of 1 if the respondent had received vocational training during the 12-month period preceding the survey and 0 if otherwise. A positive impact of vocational training on income is expected, premised on the argument that training contributes to the formation of human capital which subsequently helps increase productivity, and finally an enhanced productivity translates into an increased income. The regression equation includes a good number of variables representing the socio-demographic features of the study population. The continuous variable *age* is expected to show a positive impact on income considering that age is positively related with work experience which yields higher income. A squared term of age was used as a right-hand side variable to capture the diminishing returns to age. The dichotomous variable *gender* is included in the model to capture any variation in the outcome variable arising due to gender difference. It takes a value of 1 if the respondent is male and 0 if female. A lower income for the female is expected as literature suggests that gender-based difference in income has not yet been eliminated in the developing world (Birdsall & Sabot, 1991). Respondent's religious affiliation is controlled by incorporating the variable *religion,* with the categories of Islam, Hinduism, and others. The regression model also controls for the marital condition of the respondents, incorporating the categorical variable *marital status* with the attributes of unmarried, married, and others. It can be argued that married individuals possess somewhat different attitude towards life than others; they are more serious about work, career, income, and so on. The estimated results are expected to show higher income for married. A dichotomous variable called *literacy* that assumes a value of 1 if the respondent is literate and 0 if non-literate is used to account for the educational attainment of respondents[1]. A statistically significant difference in incomes between literate and non-literate is expected. We also included a continuous variable representing the number of persons living in household and expect a positive sign for its coefficient.

The regression equation also controls for work-related factors that can influence income. The variable *perm_temp,* taking a value of 1 if the respondent works on a permanent basis and 0 if not, accounts for the very nature of the employment contract. Those working on a permanent basis are expected to earn a higher income than individuals engaged in temporary work. Another important factor is whether there is a written contract between the employee and the employer. A categorical variable *written_oral* with the categories of written agreement and oral agreement was included in the model. The estimated results are expected to show higher income for individuals having a written agreement with the employer. The dichotomous variable *full_part* captures any income differences due to the full-time or part-time status difference of the respondent, with the value 1 representing a full-time status and 0 part-time. Those working full-time are hypothesized to be earning more than individuals working part-time. We also used sector, location, and quarter dummies to capture sectoral, area and time-specific differences, if any.

Empirical model

The following multivariable regression model was estimated to examine if there is a relationship between participation in vocational training and income:

$$income_i = \beta_0 + \theta_1\, training_i + \beta_1 X_{1i} + \beta_2 X_{2i} + \varepsilon_i$$

where, $income_i$ is monthly income earned by individual i, X_{1i} and X_{2i} are the vectors of socio-demographic and work-related variables, respectively. $training_i$ is the policy variable of interest, and ε_i is the stochastic error term. The above model was estimated using the OLS technique for individuals of two age groups, 15 years and above and 18 to 35 years (young population). Finally, as part of sensitivity analysis, similar regressions were performed for the sub-samples of males and females.

Diagnostic tests

Multiple diagnostic tests were performed to examine if there were serious econometric issues with the model. One of the most frequently occurring issues with cross-sectional data is heteroscedasticity. To check if the error terms were drawn from a distribution with differing variances, Breusch & Pagan (1979) test was performed. The test results suggested a rejection of the null hypothesis indicating that the model is heteroskedastic. To address this problem the Huber-White or Sandwich estimator of variance that provides robust standard errors was used following Huber (1967) and White (1980), which produce unbiased standard errors while not requiring the assumption of independently and identically distributed errors. In addition, this particular estimator does not bring any change in the OLS estimates and increases precision for inference by providing more accurate p-values, especially in the presence of heteroscedasticity. A variance inflation factor (VIF) test was performed to test for multicollinearity. While a VIF value smaller than 10 is indicates high multicollinearity, they ranged between 1.02 and 1.80 for the variables included in the regressions. Finally, we tested the zero conditional mean assumption, and the insignificant results for regression of residuals against independent variables indicated that endogeneity is not a problem for the model, justifying the use of the OLS technique with robust standard errors.

Estimated results

Data characteristics

A descriptive statistics of the survey respondents, aged between 18 and 35, are presented in Table 3, comparing two groups. The first group includes respondents who received vocational training from any institution, public or non-public, while the second group including individuals who did not attend any training program. As Table 3 shows, an average person receiving training is 27 years old, with a standard deviation of 4.36 years. Young people not receiving such training also have a similar age structure. Females are less likely to participate in training programs, with approximately 35% of them attending vocational training.

Table 3: Summary statistics for the youth by training attendance

	Total	Training	No training
	(N=158,547)	(N=7,330)	(N=151,217)
Socio-demographic characteristics			
Income, mean (SD)	12,281	Tk. 17,028	Tk. 11,867
	(8,718)	(12,344)	(8,198)
Age, mean (SD)	26	27	26
	(5.29)	(4.36)	(5.32)
Female (%)	54.13	34.68	55.08
Religion			
Muslim (%)	89.61	87.58	89.71
Hindu (%)	8.69	11.20	8.57
Other (%)	1.71	1.21	1.73
Marital status			
Unmarried (%)	25.88	37.59	25.32
Married (%)	72.40	60.92	72.96
Other (%)	1.72	1.49	1.62
Education			
Non-literate (%)	15.29	2.40	15.92
Literate (%)	84.71	97.60	84.08
Household size, mean	4.82	4.75	4.82
Location			
Rural (%)	48.48	26.70	49.53
Urban (%)	51.52	73.30	50.47
Work-related characteristics			
Work status			
Temporary (%)	36.87	27.38	37.46
Permanent (%)	63.12	72.62	62.53
Contract			
Oral (%)	65.67	27.00	68.79
Written (%)	34.34	73.00	31.22
Work type			
Part time (%)	26.96	19.63	27.42
Fulltime (%)	73.04	80.37	72.58
Sector			
Agriculture (%)	30.31	8.65	31.63
Industry (%)	26.21	22.15	26.45
Service (%)	43.48	69.20	41.91
Quarter			
July-Sep, 2015	25.05	42.78	24.19
Oct-Dec, 2015	25.20	16.51	25.62
Jan-Mar, 2016	25.09	18.65	25.41
April-June, 2016	24.65	22.06	25.41

Source: Author's calculation from QLFS 2015-16

Almost 90% of respondents are Muslim, correctly depicting the population composition of Bangladesh by religion. Married are more likely to receive training; about 61% of them attended some sort of training program. However, the proportion of unmarried people is larger in the trained group (37.59%) than the untrained counterpart (25.32%). The literate people have a higher likelihood to receive training. About 98% of the respondents with training are literate. The percentages of literate and non-literate people in the untrained group are 84% and 16%, respectively. The two groups differ in terms of place of residence as well. About 73% of the trained people live in urban areas while no clear location-based difference was observed for the people without training. The difference between mean incomes of the two groups is statistically significant, with trained people making US$201 (Tk 17,028) per month and the untrained US$140 (Tk 11,867) per month, respectively[2]. About 63% of the respondents are employed as permanent. Approximately, 66% maintain an oral contract with the employer and 73% of respondents work on a fulltime basis. Most respondents (43%) are employed in the service sector.

The full sample analysis

The results from the OLS regressions for the two groups of people, one aged between 15 and 65 years and the other between 18 and 35, are presented in columns 1 and 2, respectively, in Table A-1. The main variable of interest *training* was found to have a statistically significant impact on income at the 1% level of significance for both age groups. People with training in the *all* group earned, on an average, US$23.16 (Tk 1,964) more per month compared with those without training[3]. For the *young* group, on the other hand, such difference was found to be US$34.78 (Tk 2,949). The coefficient on the dichotomous variable *gender* captures the income difference between men and women. Working men earn US$10.76 (Tk 912) and US$8.90 (Tk 755) more per month than a working woman, on an average, for *all* and *young* groups, respectively. The religious affiliations did not show a significant impact on income. Marital status, on the other hand, showed a statistically significant impact on monthly income at the 1% level for both groups. On an average, married people earn US$5.86 (Tk 497) and US$4.58 (Tk 388) less per month than the unmarried in *all* and *young* groups, respectively. Literate people, on an average, earn US$29.04 (Tk 2462) and US$17.97 (Tk 1524) more per month compared with the non-literate for *all* and *young* groups, respectively. Among the young people, those working as permanent earn US$3.22 (Tk 273) more per month compared with respondents working on a temporary basis. Those working fulltime earn US$5.76 (Tk 488) more per month than individuals working part-time. Young respondents maintaining a written contract with the employer earn US$32.23 (Tk 2,733) more compared with individuals working based on an oral contract. Compared with the young people working in the agriculture, those working in the service sector earn US$27.02 (Tk 2291) more per month.

Sensitivity analysis

The impacts of attending vocational training on income were analyzed for the male and female sub-samples as part of robustness check. The estimated results are presented in Table A-2, with columns 1, 2, 3, and 4 containing estimates for the *all male*, *young male*, *all female*, and *young female* groups, respectively[4]. It can be observed that the

estimated equations using these sub-samples are fully consistent with those shown in Table A-1. The estimated coefficients in the two tables have the same signs and are comparable in magnitude. The total number of working men and women are 59,197 and 16,554, respectively. Of them, 30,370 are young male and 9,684 are young female. Young male with vocational training earn US$37.23 (Tk 3,157) more per month than untrained young male, while for young women the difference in income between those with and without training is USD24.24 (Tk 2,055).

Discussion

The study found a significant income difference between people who received vocational training and those who did not that is attributable to participation in training. This finding remains true for both age groups of 15 - 65 years and 18 - 35 years. The estimated effect of training for the young is larger than that for the full sample, indicating that receipt of vocational training makes the young people more productive and help them earn more income. The male and female subsamples also provided estimates of comparable magnitudes, giving additional support for the robustness of results. Such consistent estimated results from the full sample and the subsamples, controlling for socio-demographic characteristics and work-related variables, help determine the income impact of attending training. The study also explored other predictors of income for the youth. Literate people were found to earn a greater income than the non-literate. The gender-based discrimination was evident from the results; females, on average, earned less than males across samples. The results show that married individuals, on an average, earn less than the unmarried, which remain consistent across samples. This particular result goes against the original hypothesis about the relationship between marital status and income. However, the estimated effects are small in magnitude.

The study has a number of key limitations. It may not be completely free from the self-selection bias, a problem that can arise when individuals receiving vocational training are not randomly selected. It is possible that a person with more innate ability or higher level of education might self-select into the group of people receiving training. Such selection bias might create endogeneity problem in the model. However, diagnostic tests performed suggested no endogeneity problem as mentioned earlier. Furthermore, the use of a good number of control variables, relating to socio-demographics and work, and a nationally representative dataset that is based on probability sampling helped reduce potential endogeneity. Some limitations are inherent to the QLFS 2015 dataset itself. It does not provide a complete form of longitudinal data, making the respondents incapable of being tracked across the quarters. The availability of longitudinal data would allow researchers to use panel data models. Using estimators such as first-difference, fixed-effect, and random effects, one could control for innate ability.

Conclusion

This study evaluated the impact of attending vocational training on income, with a special focus on the youths, aged between 18 and 35 years. The results showed that training significantly increases income for all, including young. Other results showed

that gender, literacy, working hours, and nature of employment are related with income. The findings have important policy implications for developing nations sharing common labour market characteristics, including Bangladesh. Given the size of the young population of Bangladesh and the number of individuals requiring vocational training, more opportunities for different types of training programs, focusing on up-to-date skills, should be created. It can be mentioned that many of the currently available training programs are not updated and need based (Hossain, 2010). Therefore, an upgradation of the existing training programs and offering programs that are expected to increase skills required for the modern world should be put on the priority list. Also, emphasis should be given on creating a skilled workforce needed for the sectors having good export prospect. One strategy for the developing countries might be focusing attention on making the exportable more competitive. It is the skills of using sophisticated machines and innovation that can make countries efficient in producing goods having high demand in the world market. On the other hand, a huge number of people from developing countries work in economically advanced countries. In many cases they remain ill paid simply because they lack adequate skills. Providing vocational training to the youth is just one program that is required for the overall youth development. It is equally important to make sure that all ongoing programs including microcredit services, awareness creation programs are being operated effectively. Therefore, a future direction of research might be exploring the effectiveness of each program undertaken that is intended for youth development, as the programs are complementary to one another. Finally, sector-specific analyses will help understand the complete picture.

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Appendix

Table A-1: OLS regression results for the full sample and young

	All	*Young*
Age	478.9***	-159.3*
	(19.2)	(91.5)
Age^2	-4.6***	7***
	(.2)	(1.7)
Gender		
Female (ref.)		
Male	911.9***	754***
	(102.4)	(103.9)
Religion		
Islam (ref.)		
Hinduism	-134.5	79.6
	(134.1)	(149.7)
Other	-559.6*	-455.7
	(289.2)	(311.2)
Marital status		
Unmarried (ref.)		
Married	-496.8***	-387.7***
	(131.1)	(115)
Other	-2096.8***	-1954.3***
	(239.5)	(280.8)
Literacy		
No (ref.)		
Yes	2462.4***	1523.7***
	(99.5)	(117.1)
Household size	58.3***	56.5***
	(20.5)	(20.9)
Receipt of training		
No (ref.)		
Yes	1963.8***	2948.9***
	(184.3)	(163.7)
Employment type		
Temporary (ref.)		
Permanent	461.4***	273***
	(89.6)	(94.7)
Working hours		
Part time (ref.)		
Fulltime	447.3***	487.1***
	(115.9)	(126.5)
Employment contract		
Oral (ref.)		
Written	4297.9***	2732.8***
	(93.1)	(97.2)

Working sector		
Agriculture (ref.)		
Industry	961.2***	1207.9***
	(124.2)	(143.3)
Service	2603.1***	2290.9***
	(126.8)	(147.7)
Residence		
Rural (ref.)		
Urban	1216.3***	753.8***
	(85)	(90.7)
Survey quarter		
July-Sep, 2015 (ref)		
Oct-Dec, 2015	1599.6***	1032***
	(109.3)	(118.7)
Jan-March, 2015	1545.5***	1150***
	(108.3)	(118.6)
April-June, 2015	1544.1***	1039.6***
	(109.6)	(119.7)
Constant	-5266.2***	5026.4***
	(365.5)	(1208.6)
No. of observations	75751	40054
R-squared	.124	.098

*Standard errors are in parentheses, *** p<.01, ** p<.05, * p<.1*

Table A-2 OLS regression results for the male and female sub-samples

	All Male	*Young Male*	*All Female*	*Young Female*
Age	486.6***	-215.3*	437.4***	73.3
	(23.3)	(113.6)	(31.6)	(129.4)
Age^2	-4.7***	8.3***	-3.9***	1.7
	(.3)	(2.1)	(.4)	(2.4)
Religion				
Islam (ref.)				
Hinduism	-311.9*	-188.4	329	896.1***
	(162.4)	(186.5)	(212.3)	(210)
Other	-926.9**	-959.2**	-182.6	592.9
	(379.7)	(419.9)	(385.2)	(375.8)
Marital status				
Unmarried (ref.)				
Married	-494.5***	-461***	-533.6**	-359.3**
	(158.9)	(141.7)	(212.4)	(174)
Other	-1669.2***	-1625.3***	-2174.2***	-1890.4***
	(497.6)	(618.4)	(273.7)	(259.4)

Literacy				
No (ref.)				
Yes	2076.3***	1121***	3717.6***	2483.3***
	(120.1)	(148.7)	(159.1)	(155.9)
hhsize	38.9	42.3*	117.9***	120.1***
	(24.5)	(25.4)	(34.1)	(32.2)
Receipt of training				
No (ref.)				
Yes	2041***	3156.7***	1436.5***	2055.2***
	(229.1)	(208.1)	(269.6)	(218)
Employment type				
Temporary (ref.)				
Permanent	441***	284.6**	610.6***	350**
	(107.4)	(116.8)	(145.7)	(136.8)
Working hours				
Part time (ref.)				
Fulltime	210.1	186.2	1160.5***	1283.8***
	(146.7)	(165.4)	(164.1)	(160.6)
Employment contract				
Oral (ref.)				
Written	4497.6***	2788.7***	3511.1***	2402***
	(112.3)	(121.7)	(150.2)	(135.6)
Working sector				
Agriculture (ref.)				
Industry	1122***	1293.7***	513.9**	1537.5***
	(142.2)	(167.7)	(256)	(265.4)
Service	2618***	2131.1***	2747***	3514.9***
	(148.3)	(175.3)	(246.2)	(261.1)
Residence				
Rural (ref.)				
Urban	1379.8***	879.7***	569.7***	302.9**
	(100)	(109.7)	(148.5)	(140.5)
Survey quarter				
July-Sep, 2015 (ref)				
Oct-Dec, 2015	1552.7***	999.5***	1762***	1037***
	(130.5)	(146.6)	(178.9)	(169.9)
Jan-March, 2015	1713***	1281.2***	991.6***	733***
	(129.2)	(146.4)	(177.8)	(169.7)
April-June, 2015	1683.5***	1206.4***	1027.4***	437.3**
	(130.6)	(147.2)	(181)	(173.8)
Constant	-4116.2***	6848.6***	-5341.8***	1003.1
	(442.3)	(1506.5)	(610.1)	(1711.1)
No. of observations	59197	30370	16554	9684
R-squared	.114	.084	.19	.205

*Standard errors are in parentheses, *** p<.01, ** p<.05, * p<.1*

Notes

[1] BBS uses the definition of literacy laid down in the Non-Formal Education Policy, 2006. It says "Literacy is the ability to read, understand, interpret, communicate and compute in verbal and written forms in varying contexts. It involves a continuum of learning that enables individuals to develop their potentials and knowledge base and to participate fully in community affairs and wider social and development context" (Bureau of Non-Formal Education (BNFE)).

[2] An exchange rate of US$1=Tk 84.79 was considered

[3] *all* = respondents aged between 15 and 65 years, *Young* = respondents aged between 18 and 35 years

[4] *all male* = males aged between 15 and 65 years, *young male* = males aged between 18 and 35 years, *all female* = females aged between 15 and 65 years, *young female* = females aged between 18 and 35 years