

# Welfare Impacts of Factory Jobs: Experimental Evidence from Ethiopia

Niklas Buehren\*

January 2018

**VERY PRELIMINARY DRAFT, DO NOT CITE**

## Abstract

Many countries in Sub-Saharan Africa face a rapidly growing population and labor force. Ethiopia has reacted to this challenge by prioritizing large-scale industrial development, in particular through the construction of industrial parks, to drive economic growth and job creation. However, the African experience with industrial work so far has been inconsistent. In order to provide further evidence on the welfare effects of factory jobs in Ethiopia, we randomly assign individuals from a sample of job seekers to receive additional support during the application and onboarding process at three firms. We find that the extra support increased the likelihood of individuals in the treatment group to have been employed recently and raised their reported monthly income by nearly 30 percent. We also find improvements in standardized health and cognitive skills scores among the treated. These findings contrast with the impact on the treatment group's perception of factory work as these jobs are now seen as being less healthy and only temporary in nature.

*JEL Classifications: J24, J28, J63, O14*

---

\* Buehren: The World Bank, 1818 H Street, NW Washington, DC 20433 ([nbuehren@worldbank.org](mailto:nbuehren@worldbank.org)). We thank Taylor Van Salisbury and Adiam Hagos Hailemicheal for excellent research assistance and the Ethiopian Development Research Institute (EDRI) for expert field implementation. We are grateful to the World Bank Umbrella Fund for Gender Equality for funding the research. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

## **I. Introduction**

The demographic transition is presenting many countries in Sub Saharan Africa with both an opportunity and a challenge: On the one hand, a rapidly increasing labor force boom can be a thrust for long-term growth and development; on the other, the demographic developments may lead to increasing discontent and instability if the growing young labor force cannot be provided with jobs of sufficient quantity and quality. Ethiopian policy makers have recognized the need for massive job creation and prioritized large-scale industrial development to drive growth and job creation. While it is too early to evaluate the effects of the industrialization strategy, pieces of evidence so far point both towards successes and challenges.

The general consensus is that stable wage work in formal firms is a preferable path to prosperity. In the industrial sector, specifically, formal firms often pay higher wages compared to informal employment because of efficiency wages, firm competition for scarce skills, and/or union bargaining. Even when such jobs are low-skill and low-wage, they are often considered better than most poor people's alternatives as they offer a higher degree of economic security. There is also evidence suggesting that industrial work can have a positive impact on women's empowerment, negotiating power, and quality of life (Kabeer 2002; Atkin 2009).

Indeed, women's access to formal jobs and increased wages are critical for poverty reduction and gender equality. However, the African experience with industrial parks has been inconsistent. Even where IPs have successfully attracted investment, concerns remain over the quality of employment and issues of sustainability. While factory work may theoretically afford women opportunities to gain financial, social, and personal autonomy, formal employment does not relieve them of household responsibilities or caregiving obligations, which require temporal flexibility. The manufacturing labor market is not designed to accommodate such cultural norms and gender dynamics and operates solely on the incentive created by rewarding individuals who work stipulated hours.

Several studies have shown that industrial jobs do not necessarily improve worker welfare and thus may not be a desirable form of employment for many (Carneiro and Henley, 2001; Blattman and Dercon, 2015). This tends to be the case in environments where firms' competitive advantage is derived from exploiting low-wage labor costs, forcing a "race to the bottom" (Farole 2011b).

Indeed, emerging evidence from Ethiopia indicates that industrial jobs may not be as attractive to female employees as anticipated. Worker attrition challenges commonly cited by newly established firms in Bole Lemi support such a conclusion. Furthermore, preliminary results from an experiment conducted with five Ethiopian industrial firms by Blattman and Dercon (2015) showed that of those applicants who were actually offered a factory job, 10 percent never showed up on the first day, 20 percent quit in the first month, and only 32 percent were employed in any factory or commercial farm one year on—as compared to 20 percent of the control group. The study identified several factors influencing retention, including rigid working conditions, inadequate compensation packages as well as and misaligned expectations between employers and their workers. In fact, workers often chose casual labor, employment in informal enterprises, or self-employment over factory work despite such jobs having fewer and less predictable hours of work. High worker turnover seems to represent a misalignment between the value individual workers place on formal industrial work and the value the labor market places on it.

Against this background, we evaluate the impact of supporting and partly facilitating the job application process for young women wishing to seek a production line position at one of the factories in the Bole Lemi IP. We advertised for the factory positions and directed interested applicants to a local sub-district (woreda) administration office for registration. At the woreda offices, enumerators screened applicants to determine their eligibility according to the hiring criteria of the partnering firms in the IP. Fully eligible individuals received an invitation to interview with an IP firm and were provided with transportation to the factory for the interview. Following the firm interview, the firms decided whether to make a job offer to the applicants, and initiate any hiring procedures for the individuals who they wanted to hire. We partnered with three firms operating in the Bole Lemi IP. These firms were all foreign-owned and produced finished garments for export. They also had large-scale hiring plans for the study duration. Each of the firms had agreed to interview the applicants the research team has randomized into the study sample.

Our results show that ...

The remainder of this paper is organized as follows. Section 2 the context of factory work in Ethiopia. Section 3 describes the research design, data and estimation strategy. Section 4 presents estimates of the intervention's impact on ... . Section 5 provides the concluding remarks.

## **II. Industrial Parks and Factory Jobs in Ethiopia**

Despite accelerated progress towards development and poverty reduction, Ethiopia remains amongst the poorest countries in the world, challenged by the need to create opportunities for its rapidly growing population. With the majority of the population (over 70 percent) still engaged in the agricultural sector, structural transformation has been very slow (World Bank 2014). The government's plan for the economy to transition from a reliance on agriculture to a greater emphasis on manufacturing, particularly of tradable goods, is further motivated by Ethiopia's growing population of landless youth in rural areas. This phenomenon, combined with insufficient rural job creation, is spurring large-scale migration to urban areas (World Bank 2007). Addis Ababa remains the preferred destination for many migrants, and it has the highest proportion of recent migrants (9.6 percent) and total migrants (45 percent) of any city in Ethiopia (CSA 2012).<sup>1</sup>

For countries endowed with a vast pool of low-skilled labor like Ethiopia, IPs are intended to absorb large-scale unemployment and create opportunities outside of the informal sector (Fasih and Akhlaque 2014; World Bank 2000). As part of its industrialization and structural transformation agenda, Ethiopia has recently completed the construction of its first industrial park (IP), called Bole Lemi I.<sup>2</sup> Located on the outskirts of the capital, Addis Ababa, the government has

---

<sup>1</sup> Migrants are concentrated in the most productive age groups, with 59.7 percent of all recent migrants between the ages of 15 and 29 years old. Overall, there are more female migrants than male migrants (CSA 2012). Most people migrate to urban areas in search of education and employment opportunities, and are, for the most part, educated and skilled enough to transition to better livelihoods in their destination cities (Shilpi and Yao 2014). But migration does not necessarily result in a more equitable distribution of the wealth it generates, with youth and women and children bearing the highest cost of inequality (Tacoli 2012). In particular, poor female migrants are highly vulnerable to adverse labor market conditions and are less able to overcome the obstacles arising from their migration status (World Bank 2010).

<sup>2</sup> Ethiopia currently has three operational industrial parks (Bole Lemi I, Eastern and Hawassa) and two additional parks (Mekelle and Kombolcha) were inaugurated in early July 2017.

been actively pursuing foreign direct investment (FDI) to launch its light-manufacturing sector, particularly in garment production.

At the initiation of the study, there were ten foreign-owned firms operating in the Bole Lemi, eight of which produce textiles and garments, and two of which produce leather goods. Each firm in the IP occupies between one and five large production facilities, or “sheds”, which the firms rent from the Ethiopian government in exchange for tax breaks, customs assistance and various other benefits the government provides for firms directly investing in the Ethiopian economy. Each of the sheds has the capacity to accommodate between 1,000 and 2,500 production workers at a time. The majority of firms in the IP had only recently begun production and were looking to hire large numbers of workers to slowly increase production.

Though each IP firm offered a firm-specific compensation package to its production-line workers, the cross-firm differences in remuneration were relatively small. At the start of the study in April 2016, the average starting wage at most firms was about 750 Ethiopian birr per month before taxes, with incremental increases of 100 birr every 3-6 months thereafter.<sup>3</sup> In addition, firms either provided lunch directly to their workers in their factory cafeteria or pay workers a lunch stipend of about 300 birr per month. Several firms also provided workers with transportation to and from work by running buses to multiple neighborhoods in the sub-cities closest to the IP. Rounding out the compensation package were work-related medical insurance, firm contributions to a worker pension fund and various incentive schemes related to worker attendance and productivity.

Furthermore, firms in Bole Lemi I were primarily hiring female employees, and thus creating a path for many young women to enter the formal economy for the first time. In Ethiopia, where women are at an inherent disadvantage due to social norms, unequal institutions, and other barriers to the labor market participation, the light-manufacturing sector has the potential to catalyze women to become powerful agents of growth and poverty reduction. Unfortunately, the feminization of labor can have unintended consequences, as it sometimes has in other parts of the world. For example, Ghosh (2002) and Seguino (2000) show that East Asia’s export-oriented industrialization was highly dependent on the gender-based wage inequality. The stereotype that women are more nimble and docile—and thus more suitable for low-paid work with few

---

<sup>3</sup> In April, 2016, US \$1 was worth roughly ETB 21.5.

opportunities for advancement—reinforced this wage inequality, particularly in the textile, garment and leather sectors. Furthermore, the segmentation of women into these export-intensive industries, where the price elasticity is high, restricted their bargaining power. This allowed firms to keep wages artificially low, and widened the gender wage gap further (Berik et al 2004; Seguino 2000b; Chamarbagwala 2006).

As industrialization accelerates in Ethiopia, this is an opportune time to document the impact these new manufacturing jobs have on the livelihoods and empowerment of young women—and the associated economic and social impacts on young women’s households. The current knowledge base on export-intensive manufacturing focuses more on the macro implications of such activities, with outcomes at the micro level less well understood. Filling this knowledge gap will help to shape a more inclusive industrialization policy that benefits a growing segment of the Ethiopian population.

### **III. Research Design, Data and Empirical Strategy**

This study is based on supporting and facilitating the job application for factory work for a randomly selected sample of eligible job applications.

#### *Research Design*

During the initial phase of the evaluation, the research team collected hiring criteria and hiring plans from each participating firm and used this information to target interested job candidates. It is worth stressing that all partnering firms were only willing to hire women for the factory floor jobs considered for this study. The factory positions were advertised using various methods, including posting advertisements in public places, passing out flyers in high-traffic areas of the city, coordinating with youth associations and utilizing other forms of community mobilization. Unemployed individuals who have registered with their local woreda were also be contacted directly by a professional HR consultant.

During the recruitment process, those individuals identified as potential candidates were told to bring their identification and qualification documents to the nearest screening center which was set up in several woreda offices across three sub-cities of Addis Ababa. These screening centers were staffed by trained enumerators every day of the working week from 9am-3pm.

During the scheduled opening hours, enumerators reviewed the documentation of the interested applicants who visited the screening centers and determined their eligibility for the advertised positions. Applicants with incomplete documentation or those who did not meet any firms' eligibility criteria (i.e. applicants fell outside of the targeted age range or were unable to provide proof of the required education) were screened out from the study. All applicants who met the eligibility criteria and had proper documentation to prove their eligibility were selected into the sample and asked to stay for the baseline survey. Given that all firms were only considering female applicants, the study sample comprises of only women.

Study participants were then randomized into treatment and control, with two-thirds of applicants in the treatment group and one-third in the control group using a public lottery method. Once randomized, the treatment applicants were assigned a specific firm to interview with. This stage was complicated by the fact that each of the participating IP firms has slightly different hiring criteria.<sup>4</sup> These differences create multiple distinct applicant groups according to the intersecting hiring criteria. Those treatment applicants who were eligible for multiple firms were asked for a second random draw for firm assignment.

Once firm assignment was determined, the enumerators formally invited the treatment individuals to a firm interview and informed them that they will be given transportation to the firm at the Bole Lemi IP for the interview.<sup>5</sup> As such, both treatment and control individuals only learned about their treatment status after completing the baseline survey but before they left the screening center. On the day of the interview, an enumerator confirmed that only treatment

---

<sup>4</sup> For example, one firm accepts individuals between the ages of 18 and 35, but another firm only accepts those between 18 and 28; with respect to education, one firm accepts individuals who have completed grade 5 and above, but another firm only accepts those with grade 8 and above.

<sup>5</sup> In the pilot of the evaluation design, one of the primary reasons fully eligible candidates did not attend their scheduled interview was that they had difficulty getting to and finding Bole Lemi I. Providing transportation to the interview was intended to minimize sample attrition at this stage of the hiring process.

individuals were provided with transport to the firm. After the interview process was completed, all candidates were transported back to the screening center.

The firms conducted interviews with each of the treatment candidates according to their own hiring procedures and decided whether or not to offer the applicant a job. With the additional in-person eligibility verification done at the screening centers, it was anticipated that the firms would select the vast majority of the treatment candidates who participated in an interview. Treatment candidates were also required to complete any additional hiring procedures—such as a medical exams and/or aptitude tests—at this time. Once they received a job offer, treatment candidates had the option to take up the position and begin work or to decline the offer.

### *Data*

The data collection for the baseline survey took place at the screening center directly after the screening of individual job applicants in order to minimize attrition and to ensure that the treatment and control groups are fully comparable. All eligible job applicants who agreed to take part in the study were interviewed at baseline and, in total, information from 935 respondents was collected. Approximately, six months after the baseline data collection, an effort was made to re-interview all baseline respondents during the follow-up data collection. 827 baseline respondents were successfully tracked which results in an attrition rate of 88.4 percent. The information from respondents interviewed both at baseline and at follow up comprise the panel data set and the sample of panel respondents will be at the core of the impact analysis.

Table 1 indicates that on average study participants randomized into the control group were 24 years old at baseline. Less than two thirds (62 percent) of the control sample had a job in the six months prior to baseline. Also, nearly 70 percent of the control respondents had migrated to Addis Ababa. Importantly, there are no systematic differences across a wide range of observables between then treatment and the control group which suggests that the random allocation of study participants had worked well.

Finally, after each round of firm interviews was completed, the survey team compiled a summary file that contains information on interview attendance, interview outcomes (i.e., whether an

applicant was accepted or rejected by the firm), and the reasons for absence from the interview or reasons for the ultimate outcome. This data can help us to understand at which stages selection occurred and to identify drivers for these selection decisions. For example, only 88 percent of the treatment group participated in the interviews. Of those, only 40 percent accepted the job offer.

### *Empirical Strategy*

Because of the self-selection of respondents at various stages of the onboarding process, we focus on the intent-to-treat (ITT) impact of the job facilitation intervention. The ITT is estimated using simple OLS. The model is summarized in equation 1:

$$y_{it_1} = \beta_0 + \beta_1 X_{it_0} + \beta_2 treat_i + \beta_3 y_{it_0} + \varepsilon_i \quad (1)$$

where  $y_{it_1}$  is an outcome measured for respondent  $i$  measured at follow-up. The variable  $treat_i$  is an indicator equal to one if the respondent was assigned to the treatment group and zero otherwise.  $X_{it_0}$  includes a set of control variables measured at baseline. More precisely, the control variables are age, a dummy for the marital status and the highest grade completed.  $y_{it_0}$  is the outcome measured at baseline. Aside from this ANCOVA specification, we will also show the results from a simple mean comparison of the outcome  $y_{it_1}$  measured at follow-up between the treatment and the control group for comparison.

## **IV. Results**

Table 2 summarizes the key results. Above all, supporting job applicants during the hiring and onboarding process for factory work significantly increased individuals' income in the treatment group. Measured by the earnings received in the last four weeks, income increased in the treatment by nearly 33 percent over the baseline mean of the control group (or by around ETB 200). This is the clearest marker of the success of the intervention as the ultimate goal and aim of the intervention was to help job seekers to find employment and to generate income through factory work. Part of these increased earnings may have been spent on remittances given the positive and

significant impact on this expenditure measure. We do not see any increase in other expenditure categories (in general, however, the sign of the estimated coefficient on treatment is positive). The result on earnings is mirrored by the finding that individuals are more likely to have had a job over the past 6 months which increased by nearly 9 percentage points (pp). The decrease in job search behavior, such as visiting job/vacancy boards, asking people in the social network for help and work site visits, can be seen as a direct consequence of increased employment.

It is worth noting that the treatment group somewhat adjusted their expectations regarding factory work as a result of increased exposure to this type of work. The treatment group lowered expectations regarding the earning potential of factory work as well as the duration. That is, individuals in the treatment group are more likely to regard factory jobs as temporary employment. Furthermore, the treatment group is less likely to regard factory jobs as healthy. This result is in line with the findings from Blattman and Dercon (2015) who found that offering industrial jobs significantly increased health problems in their sample of Ethiopian job seekers. Interestingly, however, in stark contrast is our finding that the same standardized health score used by Blattman and Dercon (2015) increases significantly. It is worth mentioning, however, that the evaluation period in Blattman and Dercon (2015) was much longer than the six months between our baseline and follow-up data collection. We also find a positive and significant impact on the cognitive skills score which may result from a continuous stimulation through wage employment.

Measures for women's empowerment or autonomy, such as a household decision making and mobility scores, are not affected by the intervention.

## **V. Conclusion**

[...]

## **References**

[...]

Table 1: Baseline descriptives and balance properties

Dependent variables	Obs.	Mean (Treatment = 0)	Difference [Treatment - Control]
<b>Demographics</b>			
Age (in years)	827	24.233	-0.588 (0.355)
Highest grade completed	827	9.568	0.095 (0.112)
Completed TVET (yes=1)	827	0.089	0.009 (0.015)
Completed college education (yes=1)	827	0.136	0.025 (0.029)
Married (yes=1)	827	0.297	-0.051 (0.038)
<b>Living conditions</b>			
Pays house rent (yes=1)	827	0.343	-0.028 (0.033)
Cost of rent	827	188.081	-18.964 (21.091)
House rented from a private owner (yes=1)	827	0.504	-0.017 (0.035)
<b>Cognitive and health scores</b>			
Standardized cognitive skills score <sup>^</sup>	827	-0.008	0.069 (0.067)
Standardized health score <sup>^</sup>	827	0.104	-0.072 (0.060)
<b>Earnings, savings and transfers</b>			
Earnings (past four weeks, in birr)	827	331.805	-17.924 (38.214)
Savings (past four weeks, in birr)	826	144.492	-37.400 (41.400)
Remittances sent (past six months, in birr)	827	411.441	101.757 (170.764)
<b>Consumption expenditure</b>			
Food expenditure (past seven days, in birr)	825	113.000	17.025 (14.637)
Non food expenditure (past month, in birr)	827	374.441	-17.498 (22.450)
<b>Food consumption</b>			
Number of meals per day	827	2.962	-0.006 (0.028)
	827	0.208	-0.043

Number of times respondent went to bed hungry (past week)			(0.078)
---	--	--	---------

**Decision making**

Household decision making score °	827	3.449	-0.030 (0.084)
Mobility score °	827	3.686	-0.028 (0.050)

**Job and employment characteristics**

Travel cost~(in birr)	190	7.944	-0.040 (0.717)
Travel time~(in minutes)	188	53.333	3.905 (4.304)
Expected earnings from working at garment factory (in birr)	825	1320.339	21.766 (42.223)
Number of visits to vacancy boards (last 4 weeks)	827	2.165	0.307 (0.215)

**Perception of factory jobs**

Percieves garment factory jobs as healthy (yes=1)	827	0.623	0.001 (0.044)
Percieves factory jobs provide a steady income (yes=1)	827	0.814	0.019 (0.023)
Percieves factory jobs as temporary (yes=1)	827	0.161	-0.021 (0.024)

**Employment history**

Work experience (in years)	698	3.364	-0.121 (0.298)
Had a job over the past 6 months (yes=1)	698	0.617	0.050 (0.042)
Number of jobs over the past 6 months	698	0.719	0.069 (0.054)
History of self-employment (yes=1)	698	0.214	0.027 (0.031)
Average monthly earning from previous jobs (in birr)	640	1364.180	-73.869 (70.556)

**Migration**

Migrated to Addis Ababa (yes=1)	827	0.695	-0.006 (0.043)
---------------------------------	-----	-------	-------------------

---

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; SE in parentheses; SE clustered at woreda level; Number of observations is low because the majority of respondents do not know the travel time or travel cost to reach Goro Roundabout; ~Standardized sum of scores to 10 statements on personal health on a scale of 1 (Easily) to 4 (Unable); ^ Standardized sum of scores to 8 questions on cognitive skills; ° Number of decision making items on which she makes decisions solely or jointly with other household members out of a total of five; ° Number of places respondent can go to without needing permission (out of a total of 4 places)

Table 2: Intervention impacts

Dependent variables	Obs.	Mean (Control group)	Mean comparison	ANCOVA
<b>Living conditions</b>				
Pays house rent (yes=1)	827	0.263	0.018 0.049	0.023 0.041
Cost of rent (past month, in birr)	827	156.314	15.414 (31.074)	18.953 (30.538)
House rented from a private owner (yes=1)	827	0.504	-0.017 (0.035)	0.000 (0.000)
<b>Cognitive and health scores</b>				
Standardized cognitive skills score <sup>^</sup>	827	0.220	0.104** (0.042)	0.089** (0.040)
Standardized health score <sup>^</sup>	827	0.287	0.080** (0.037)	0.089** (0.037)
<b>Earnings, savings and transfers</b>				
Earnings (past seven days, in birr)	827	148.064	45.935** (18.034)	42.162** (18.147)
Earnings (past four weeks, in birr)	827	610.055	208.612*** (59.374)	200.274*** (60.926)
Savings (past four weeks, in birr)	827	68.644	26.331 (17.652)	28.581 (18.294)
Remittances sent (past six months, in birr)	697	0.000	26.667* (14.155)	19.245* (9.369)
<b>Consumption expenditure</b>				
Food expenditure (past seven days, in birr)	827	125.055	4.170 (10.487)	11.657 (7.579)
Non-food expenditure (past month, in birr)	827	339.691	42.517 (36.442)	43.075 (37.007)
<b>Food consumption</b>				
Number of meals per day	827	3.025	0.019 (0.023)	0.018 (0.022)
Number of times respondent went to bed hungry (past week)	827	0.093	-0.020 (0.035)	-0.012 (0.039)
<b>Decision making</b>				
Household decision making score <sup>o</sup>	827	3.619	-0.050 (0.097)	-0.024 (0.073)
Mobility score <sup>w</sup>	827	3.966	-0.024 (0.021)	-0.020 (0.021)

**Job and employment characteristics**

Expected earning from working at garment factory (in birr)	827	1533.263	-99.758** (37.133)	-99.536*** (33.945)
Number of visits to vacancy boards (last 4 weeks)	827	1.305	-0.193 (0.116)	-0.206* (0.116)
Number of visits to work sites to inquire about work (last 4 weeks)	827	0.708	-0.202** (0.092)	-0.200** (0.093)
Number of friends and relatives asked to help her get a job	827	2.233	-0.526** (0.248)	-0.517** (0.236)
Number of times applied to a formal wage paying job (last 4 weeks)	827	0.203	-0.039 (0.051)	-0.044 (0.051)
Number of brokers contacted to inquire about job (last 4 weeks)	827	0.517	-0.151 (0.109)	-0.156 (0.110)
Intention to search for a better job while working at factory (yes=1)	827	0.805	0.044 (0.038)	0.044 (0.038)

**Perception of factory jobs**

Percieves garment factory jobs as healthy (yes=1)	827	0.453	-0.189*** (0.047)	-0.187*** (0.045)
Percieves factory jobs provide a steady income (yes=1)	827	0.627	-0.011 (0.037)	-0.009 (0.035)
Percieves factory jobs as temporary (yes=1)	827	0.072	0.053** (0.019)	0.049** (0.019)

**Employment history**

Work experience (in years)	778	2.845	-0.144 (0.236)	0.041 (0.217)
Had a job over the past 6 months (yes=1)	778	0.649	0.107*** (0.036)	0.088** (0.036)
Number of jobs over the past 6 months	778	0.698	0.106** (0.044)	0.085* (0.045)

---

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; SE in parentheses; SE clustered at woreda level; Number of observations is low because the majority of respondents do not know the travel time or travel cost to reach Goro Roundabout; <sup>†</sup>Standardized sum of scores to 10 statements on personal health on a scale of 1 (Easily) to 4 (Unable); <sup>^</sup>Standardized sum of scores to 8 questions on cognitive skills; <sup>°</sup>Number of decision making items on which she makes decisions solely or jointly with other household members out of a total of five; <sup>ω</sup>Number of places respondent can go to without needing permission (out of a total of 4 places); ANCOVA controls for age, marital status and highest grade completed.