

4 Education and Other Indicators of Women's Awareness and Exposure

Education equips individuals with skills that allow them to better understand, interpret, and operate in their current environment, and to cope successfully in modernizing environments (Inkeles and Smith, 1974). Thus, where female education rates are low, and differentials in male and female education rates are high, women are likely to be disadvantaged not only in the workplace but also at home. However, while education is assumed, almost by definition, to have the effects of informing, training and equipping, much depends on the number of years of education and the quality of education. It is unclear how many years of education are necessary, or whether there is a minimum or a maximum number of years before an individual becomes "educated." The link between years of education and knowledge acquired will also vary across countries depending on factors such as teacher training, the nature of educational facilities, and the length of the school year (Vespoor, 1989).

In addition, formal education is not the only source of knowledge, nor is it the only instrument for developing the minds of individuals and increasing their awareness. Media exposure through newspapers, radio, television, and films has been identified as a major tool for increasing awareness. In general, exposure to radio and television allows the values and aspirations of the literate world to filter down and condition the values of individuals even in nonliterate environments (Lerner, 1958). Further migration, especially between rural and urban areas is likely to generate the ability to cope with new environments.

In this chapter, first the extent of female disadvantage in education is examined. Education is measured both in terms of the standardized categories of levels of education—none, primary, and secondary and higher—and in terms of the number of years of education. Since categorization by level of education does not distinguish between level attended and level completed, care is taken to make this distinction. As mentioned in Chapter 1, there is no one-to-one relationship between level of education and years of education. Since educational systems differ across countries and also change over time within countries, the number of years required to complete each level of education varies across countries (see Appendix Table A.1).

Given that formal education is neither a necessary nor a sufficient condition for literacy (the minimal skill generally assumed to be imparted by education), the extent to which education and literacy overlap for women is also examined. Following the examination of education differentials among women and between men and women, data are presented on the extent to which women are conditioned by two other sources of exposure, the media and migration. Finally, demographic variables which reveal women's awareness and degree of exposure to modernizing influences are explored.

4.1 EXTENT OF FEMALE DISADVANTAGE IN EDUCATION

Countries vary greatly by the percent of population (age 15 years or more) in each category of education (Table 4.1). There are three countries, all in Sub-Saharan Africa—Burkina Faso, Niger and Senegal—where the percent of population with no education exceeds 70 percent, and four countries—Colombia, Paraguay, Peru and the Philippines—where the percent of population with no education is below 10 percent. However, except in Brazil and the Dominican Republic, far more females than males have no education. Indeed, the sex ratio of the population with no education is below 75 in 19 countries, and is below 50 in eight countries (i.e., two uneducated women for every uneducated man). Plotting the sex ratio of the population (age 15 years or more) with no education against the total population (age 15 years or more) with no education (Figure 4.1) suggests that in uneducated populations men and women are equally uneducated, but as education spreads, the uneducated population tends to become predominantly female. This relationship appears particularly true for countries where more than one-third of the population is uneducated. In countries where one-third or less of the population has no formal education, there is large variance in the sex ratio of the uneducated population. Among this latter group are Brazil, Colombia, the Dominican Republic, Namibia, and the Philippines where the sex ratio tends towards equality even though a high proportion of the population is educated.

Table 4.1 Population characteristics by educational status

Percent and sex ratio of population age 15 years or more by education, Demographic and Health Surveys, 1990-1994

Country	Population with no education		Population with primary education		Population with secondary and higher education		Total population		Sex ratio of population 15 years or more ¹
	Percent	Sex ratio	Percent	Sex ratio	Percent	Sex ratio	Percent	Number	
Sub-Saharan Africa									
Burkina Faso	82.9	76.5	10.2	159.6	6.9	179.7	100.0	17,350	88.0
Cameroon	45.5	55.5	30.9	120.0	23.6	152.0	100.0	10,356	90.0
Ghana	39.1	56.0	48.1	97.0	12.8	182.4	100.0	11,448	85.1
Kenya	24.0	42.5	53.1	104.5	22.8	137.8	100.0	19,126	90.7
Madagascar	25.2	68.1	51.4	99.2	23.4	110.2	100.0	15,551	97.9
Malawi	39.0	44.0	55.1	144.3	6.0	273.9	100.0	12,625	95.7
Namibia	24.9	84.6	44.8	90.5	30.3	85.3	100.0	13,466	89.1
Niger	87.8	84.8	8.0	156.7	4.2	216.7	100.0	16,701	92.7
Nigeria	55.4	68.7	24.2	135.8	20.4	174.3	100.0	25,442	97.9
Rwanda	39.7	62.6	53.0	122.5	7.4	136.9	100.0	15,954	95.7
Senegal	73.0	70.5	15.7	116.2	11.3	185.0	100.0	16,112	85.5
Zambia	18.2	43.8	53.3	101.0	28.5	182.0	100.0	18,438	103.2
North Africa									
Egypt	35.8	56.1	22.3	116.2	41.9	170.3	100.0	36,264	105.1
Morocco	60.2	62.7	18.4	159.2	21.4	162.3	100.0	23,898	91.2
Asia/Near East									
Bangladesh	49.7	69.8	25.3	110.1	25.0	200.8	100.0	28,889	101.6
Indonesia	19.2	43.9	50.4	101.0	30.4	137.6	100.0	79,303	95.2
Pakistan	61.1	68.1	13.3	198.4	25.6	262.6	100.0	27,030	108.8
Philippines	3.8	72.7	37.4	102.5	58.8	101.6	100.0	41,931	100.6
Turkey	23.4	36.8	47.9	99.8	28.6	189.2	100.0	26,140	96.1
Latin America/Caribbean									
Bolivia	16.1	32.8	34.1	87.0	49.8	126.0	100.0	23,280	90.9
Brazil	32.2	102.0	54.3	89.8	13.5	70.6	100.0	17,250	91.6
Colombia	9.2	95.3	44.8	89.6	46.0	85.3	100.0	20,275	88.3
Dominican Republic	13.5	103.7	52.9	96.4	33.7	84.0	100.0	20,222	95.2
Paraguay	5.4	49.8	62.3	96.4	32.3	111.6	100.0	16,675	98.3
Peru	7.4	27.5	30.5	90.0	62.1	112.9	100.0	44,018	96.1

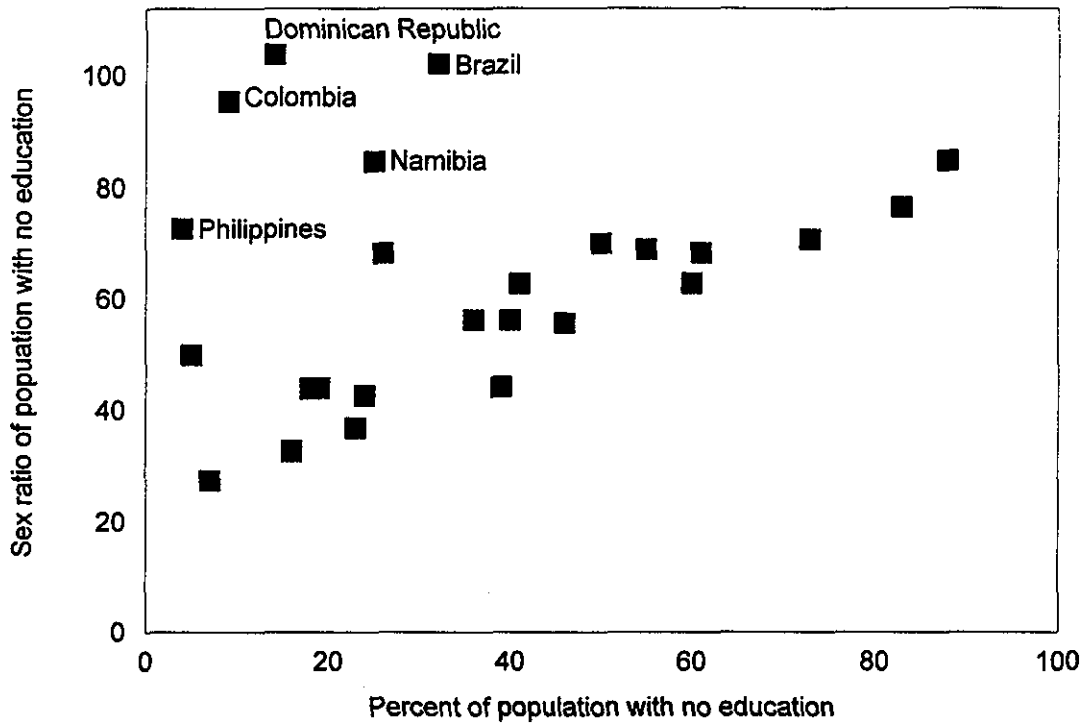
¹ Includes population that is missing responses on education. This proportion is never greater than 2 percent of the total population, except in Madagascar (5.0 percent), Namibia (2.4 percent), and the Dominican Republic (2.2 percent).

By contrast, Table 4.1 shows that the sex ratio of the population with any education tends to be more masculine, not only relative to the sex ratio of the uneducated population but also in the absolute sense of being over 100. In most countries, the sex ratio is highest among those with secondary or higher education and least among those with no education. Further, the sex ratio of the population with primary education is above 100 in 15 of the 25 countries ranging from a low of 87 in Bolivia to a high of 198 in Pakistan. Among those with secondary or higher education, the

sex ratio is above 100 in all countries except Brazil, Colombia, the Dominican Republic and Namibia. In addition, the sex ratio is above 150 in about half of the countries and rises to between 200 and 274 in Bangladesh, Malawi, Niger, and Pakistan.

Notably, Brazil, Colombia, the Dominican Republic, and Namibia are the only countries that appear to favor women in terms of education. They all have relatively high sex ratios among the population with no education, sex

Figure 4.1 Scatter plot of the sex ratio of population with no education by percent of population with no education, for population age 15 and over, Demographic and Health Surveys, 1990-1994



ratios below 100 for those with primary or secondary education, and a sex ratio for those with secondary education that is actually lower than the sex ratio for those with primary education. In addition, in the Philippines, the sex ratio for those with primary education is slightly higher than that of the population with secondary education, but the most striking result is that both are very close to 100.

It is clear that, in most countries, women are disadvantaged relative to men with regard to any education. However, the education levels used in Table 4.1 mask the large variations within each level. The benefits of education are cumulative in nature, and depend on both the amount of education received and its continuity. Thus, it would be useful to compare the proportion of all females and males that complete the level of education to which they are ascribed, and to also examine how the proportion going on to secondary education among those completing primary education varies by gender. These comparisons are presented in Table 4.2. (see Appendix Table A.1 for country-specific correspondence between level of education and years of education).

Among those who start primary education, the proportion of males who complete the primary level is higher than the proportion of females who do so, although the difference is not always large (Table 4.2). Once again the exceptions are Namibia and Rwanda in sub-Saharan Africa, the Philippines in Asia, and Brazil and the Dominican Republic in the Latin America/Caribbean region. Also, in 15 countries, about one or more out of three women do not complete primary education among those who begin it, and in Brazil, Madagascar, Malawi, Niger, and Rwanda, this number rises to two or more out of three.

The discontinuation of education after the completion of the primary level is again higher among females than males in 19 countries including Namibia and the Philippines. Only in Brazil, Colombia, the Dominican Republic, Madagascar, Morocco, and Niger, do more females than males go on to receive secondary education among those who complete primary education. The discontinuation at this stage of education, for both men and women is particularly high in Ghana where only 19 percent of women and 29 percent of men who have completed primary education

Table 4.2 Completion of educational level by sex

Percentage by sex of persons age 15 years or more who have completed the level of education to which they are ascribed, and percentage who went on to secondary education after completing primary education, Demographic and Health Surveys, 1990-1994

Country	Those who completed primary among those with some primary education		Those who went on to secondary education among those who completed primary education		Those who completed secondary education among those with some secondary education	
	Females	Males	Females	Males	Females	Males
Sub-Saharan Africa						
Burkina Faso	65.6	68.5	59.3	60.9	15.3	22.4
Cameroon	60.2	66.9	66.4	68.4	6.8	13.4
Ghana ¹	80.6	88.2	19.4	29.3	38.4	49.2
Kenya	59.7	65.6	45.2	50.0	6.0	10.9
Madagascar	33.7	37.0	89.5	87.5	10.8	14.3
Malawi	17.9	30.5	37.0	38.9	37.2	42.8
Namibia	51.6	48.8	79.5	81.2	19.4	23.4
Niger	33.7	42.1	88.9	88.3	8.8	14.1
Nigeria	76.8	81.7	54.8	59.1	53.1	65.0
Rwanda	23.6	21.7	48.9	58.7	9.3	12.5
Senegal	71.0	78.8	49.8	59.0	23.8	30.4
Zambia	64.3	73.8	42.9	55.1	22.0	31.6
North Africa						
Egypt	66.6	75.0	90.1	91.7	59.4	60.8
Morocco	75.6	79.2	70.7	68.1	26.2	30.6
Asia/Near East						
Bangladesh	61.0	70.3	67.0	79.3	29.9	42.6
Indonesia	63.6	70.0	53.2	58.6	43.2	47.6
Pakistan	85.6	85.9	71.6	78.9	21.2	20.0
Philippines	82.2	80.2	74.5	76.1	73.2	72.0
Turkey	90.2	95.4	32.4	46.0	54.0	49.3
Latin America/Caribbean						
Bolivia	68.6	75.4	79.7	84.4	44.3	43.7
Brazil	26.7	23.1	81.2	77.5	18.9	20.0
Colombia	71.3	71.4	71.9	70.0	43.6	48.0
Dominican Republic	50.4	47.8	80.3	77.8	62.2	60.5
Paraguay	58.8	61.1	55.2	58.6	47.3	43.7
Peru	82.4	86.6	78.3	80.2	68.6	71.2

¹ See Section 4.1 (footnote 1)

enter the secondary level.¹ In Malawi and Turkey, this proportion for both men and women is slightly higher but well below 50 percent.

In all countries except Malawi, irrespective of gender, the proportion of those completing secondary education out of those who have started, is lower than the proportion of those completing primary education among those who have started. The proportion of men completing secondary education is higher than the proportion of women doing so in all of the sub-Saharan and North African countries, and in Bangladesh, Brazil, Colombia, Indonesia, and Peru. By contrast, there is either a higher proportion of women than men completing secondary education among those who start it, or little difference among them in the remaining Asian, Latin American and Caribbean countries. Notably, the percent of women completing secondary education among those who start the level ranges from a low of 6 percent in Kenya to a high of 73 percent in the Philippines, while the percent of men doing so varies from a low of 11 percent in Kenya to a high of 72 percent also in the Philippines.

Another issue obscured by the aggregation of education levels is the relationship between having any formal education and being literate. On the one hand, the quality and quantity of education will mediate the relationship between education and literacy which is a minimum desirable output of any educational program. On the other hand, formal education is not a necessary condition for literacy. In the DHS, information on literacy is available for female respondents only between the ages of 15 and 49 who have no education, or incomplete or complete primary education. Female respondents having more than primary education are assumed to be literate.

There are several countries where the connection between formal education and literacy is fairly weak (Table

4.3). In Colombia, the Dominican Republic, Namibia, the Philippines, Rwanda, and Turkey, at least 10 percent of women with no education are literate, and this proportion is over 20 percent in Colombia and Namibia. In addition, in over two-thirds of the countries examined, less than 90 percent of the respondents with incomplete or complete primary education can read. In Bangladesh, Burkina Faso, Egypt, Ghana, Niger, Nigeria, Senegal, and Zambia, more than one-fourth of the women with primary education cannot read.

Table 4.3 Literacy among women by educational status

Percentage of literate women 15-49 who have no education or have primary education, Demographic and Health Surveys, 1990-1994

Country	Percentage literate ¹	
	No education	Primary education
Sub-Saharan Africa		
Burkina Faso	0.7	61.0
Cameroon	1.0	79.2
Ghana	0.7	58.8
Kenya	9.8	90.1
Madagascar	3.9	82.7
Malawi	4.7	78.8
Namibia	21.3	92.3
Niger	0.1	53.3
Nigeria	2.4	69.7
Rwanda	13.2	88.8
Senegal	0.6	74.7
Zambia	3.0	72.0
North Africa		
Egypt	1.6	53.2
Morocco	1.4	81.9
Asia/Near East		
Bangladesh	0.7	68.2
Indonesia	4.5	85.7
Pakistan	4.7	87.3
Philippines	14.7	94.5
Turkey	17.1	96.8
Latin America/Caribbean		
Bolivia	4.8	88.6
Brazil	9.3	87.4
Colombia	21.9	95.6
Dominican Republic	10.0	90.4
Paraguay	4.0	93.1
Peru	5.7	90.5

¹ Any woman who can read, whether easily or with difficulty, is counted as literate.

¹ This result appears to be an artifact of the way the standardized levels of education are defined in Ghana. In Ghana, the primary level can take between six and 10 years to complete. This anomaly arises because primary education can include optional years in middle school and post-middle school. If these optional years of middle school are assigned to secondary education and the number of years required to complete primary education are taken to be six, then the relevant percentages are: 92.3 percent of females and 95.4 percent of males have at least some secondary education among those who complete primary education, and 8.1 percent females and 15.1 percent males have completed secondary education among those who have some secondary education. These percentages are more consistent with data for other countries. Note, however, that continuation rates remain higher for males than for females.

Finally, the data presented in Table 4.1 are not only aggregated in terms of educational levels but are also aggregated across respondents of all ages. Since education is becoming more widespread over time, intergenerational differences in education are likely to be significant. Also, gender differences in the rate of spread of education will imply that the ratio of females and males at each level of education will differ across the age spectrum. In what direction is women's educational access changing relative to that of men across cohorts? This question is answered by comparing the sex ratios of the population ages 15-24, 25-49 and 50 years or more within each level of education (Table 4.4).

The sex ratio of the population with no education as stated earlier tends to be very feminine in most countries, implying that a larger proportion of those with no education are women. If the situation of women has improved over time, then the overall percent of women with no education should decrease, and the sex ratio of those with no education should tend towards equality moving from the older age groups to the younger ones.

In only seven of the 25 countries examined does the sex ratio among those with no education rises more or less steadily from being extremely feminine among those 50

Table 4.4 Sex ratio by education and age

Sex ratio by age according to education, Demographic and Health Surveys, 1990-1994

Country	No education			Primary education			Secondary and higher education			Total		
	15-24 years	25-49 years	50 years or more	15-24 years	25-49 years	50 years or more	15-24 years	25-49 years	50 years or more	15-24 years	25-49 years	50 years or more
Sub-Saharan Africa												
Burkina Faso	82.1	68.2	84.8	156.3	155.3	(280.9)	166.3	194.7	*	100.0	80.0	87.6
Cameroon	47.8	55.0	59.6	105.1	105.7	377.2	121.9	187.3	*	93.2	91.6	82.6
Ghana	60.2	50.2	61.2	99.9	85.7	165.3	138.6	184.5	605.0	95.4	79.8	84.0
Kenya	65.4	28.9	49.5	94.6	94.3	222.2	100.8	162.4	420.8	94.5	91.0	84.0
Madagascar	104.2	63.4	57.1	106.3	88.6	116.0	93.2	121.1	207.4	104.2	95.8	91.6
Malawi	61.1	35.5	45.0	120.9	150.1	202.5	166.1	325.1	(1777.7)	101.8	93.3	91.5
Namibia	160.8	90.6	71.5	108.2	74.8	86.0	70.2	95.0	114.4	96.0	88.1	81.1
Niger	72.9	85.2	99.0	156.0	152.7	*	186.1	267.5	*	88.7	92.3	99.9
Nigeria	57.2	58.6	88.9	113.4	133.5	342.4	131.1	227.8	793.3	98.4	93.1	106.8
Rwanda	84.3	57.6	59.9	94.7	133.1	295.0	125.6	133.8	*	95.7	97.5	91.6
Senegal	74.9	60.8	82.7	110.3	108.5	358.1	176.5	174.4	(937.5)	95.3	76.1	90.6
Zambia	64.8	31.1	46.4	93.5	85.3	228.8	133.4	228.5	759.8	101.5	104.3	104.7
North Africa												
Egypt	37.2	50.4	75.8	127.8	104.5	145.1	139.3	200.4	378.6	109.2	102.9	103.9
Morocco	41.2	56.8	87.6	142.8	168.0	338.1	136.7	189.6	547.6	90.1	90.5	94.3
Asia/Near East												
Bangladesh	59.6	76.2	68.4	84.6	105.9	238.1	127.3	261.7	1012.3	86.0	109.1	113.2
Indonesia	47.5	39.8	46.7	73.1	97.6	197.1	114.9	156.3	258.1	90.6	97.3	97.1
Pakistan	53.6	62.0	92.2	140.6	212.4	550.6	207.7	299.1	710.5	105.0	106.1	120.0
Philippines	102.9	81.4	64.2	153.1	100.8	81.6	96.5	103.9	112.1	107.7	102.1	87.3
Turkey	17.5	21.7	51.7	67.7	104.8	166.1	160.5	219.0	251.0	93.4	100.4	92.2
Latin America/Caribbean												
Bolivia	20.2	23.3	39.7	59.6	78.6	159.3	111.8	136.4	155.3	92.4	92.1	86.5
Brazil	213.5	110.8	79.0	99.8	83.2	80.8	61.3	74.6	88.6	102.3	90.1	81.3
Colombia	117.6	115.9	81.0	98.7	85.2	89.4	76.8	90.1	102.4	85.3	89.7	89.8
Dominican Republic	160.8	117.8	84.2	109.1	88.6	92.8	68.0	96.2	115.2	92.7	97.2	95.1
Paraguay	(64.9)	72.9	38.6	92.4	98.0	97.4	101.0	117.7	129.5	95.8	104.1	90.7
Peru	40.4	20.4	31.1	80.0	78.8	116.5	100.9	119.7	134.8	95.8	96.6	95.4

Note: An asterisk indicates that a figure is based on fewer than 50 cases and has been suppressed. Figures in parentheses are based on 50-100 cases.

years and older towards equality or masculinity among those 15-24 years. These seven countries include Madagascar and Paraguay, as well as the same five countries that have sex ratios favoring female education—Brazil, Colombia, the Dominican Republic, Namibia, and the Philippines. By contrast, in 10 countries there has been a more or less steady increase in the feminization of the uneducated population across the cohorts. In the remaining countries, there appears to have been some worsening of the situation, with even more women than men remaining uneducated in the 25-49 years age group than among the 50 years or more age group, before some improvement in the youngest cohort. Noticeably too, the sex ratio in each age group of those with no education is always lower than the sex ratio of that age group in the whole population in every country except Brazil, Colombia, the Dominican Republic, and Namibia.

When examining the population with primary education, increased feminization of the sex ratio from the older to the younger age groups is found in almost 75 percent of the countries. Nevertheless, in 13 of these countries the sex ratio of the population age 15-24 years continues to be over 100. By contrast, in Brazil, Colombia, the Dominican Republic, Namibia, and the Philippines, the sex ratio of those age 15-24 with primary education is higher than those age 50 or more with primary education. However, this trend favoring males at the primary level of education is compensated by the fact that in these countries, the population with secondary or higher education is becoming more "feminized" (the sex ratio is falling) across the generations; and in most of these countries, the sex ratio of both the 15-24 and 25-49 age groups is well below 100. In all of the remaining countries, there has also been a consistent relative feminization of the secondary or higher level of education over the generations. Nonetheless, the sex ratio of even the youngest age group (15-24 years) in most countries remains well above 100 implying that, despite improvements, females continue to lag far behind males in terms of secondary and higher education.

From this discussion, it is evident that education remains dominated by males and that there has been only limited improvement over time in women's relative position as measured by the sex ratio of the educated. There are, however, some notable exceptions where women fare well absolutely and relatively in terms of access to education: the sub-Saharan African country of Namibia, the Asian country of the Philippines, and three Latin American and Caribbean countries, Brazil, Colombia, and the Dominican Republic.

4.2 EDUCATED WOMEN BY RESIDENCE AND AGE

Education is not only supposed to impart literacy, but is also expected to have a conditioning effect on behavior and thinking that encourages innovation in both. A limited amount of education is less likely to confer these benefits since the conditioning effect of education is likely to be cumulative. In light of this, the share of educated women in reproductive ages is examined by residence and age for two different levels of education: at least four years of education and at least "some secondary education."

The choice of at least four years of education as the first cutoff point can be justified on several grounds. For one, UNICEF has chosen the percent who achieve grade level four as a critical marker of school progress for children (United Nations Children's Fund, 1993). There is also precedence in using a coding scheme that groups length of school attendance into 0, 1-3, 4-6, and 7 or more years (United Nations, 1987). In this coding scheme, the category 1-3 years of education coincides in most countries with the category of incomplete primary education; the category 4-6 years of education generally overlaps with the completion of primary education in most countries. Further, less than four years of education is found to have only a weak and often insignificant effect on fertility and contraceptive use in 26 countries, while the negative effect of more than four years of education on the same variables is strong, significant and robust in most countries (United Nations, 1995b). Finally, women with less than four years of education are more likely to be illiterate than those who complete at least primary education, since literacy is a skill reinforced by continuity in the education system. This suggests that the beneficial effects of education are most likely to be realized with at least a minimum of four years of education.

On the other hand, it is important to see what proportion of all women can be considered to be particularly advantaged in terms of education. While clearly women with "higher" education benefit most from educational conditioning effects, their number in most countries is very small. Therefore, the proportion of women with "some secondary education"—clearly not as advantaged as those with higher education, but having received enough education to gain significantly from it—is examined by residence and age.

Overall, the percent of women with at least four years of education ranges from a low of 8 percent in Niger and 14

percent in Burkina Faso to a high of over 90 percent in the Philippines. Large urban-rural differences are also observed in most countries, with the percent of women with four years of education being greater always for urban as compared to rural women (Table 4.5). Further, there are 17 countries where approximately two out of every three urban women have at least four years of education, but only five countries where rural women do so. Nonetheless, it is notable that in Burkina Faso, Niger, Pakistan, and Senegal, not even half of the urban women have four years of education and less than 10 percent of rural women have four years of education.

The share of women with four or more years of education in each age group increases as age declines in every country except Pakistan. This suggests that even though there is no evidence of consistent improvement of the position of women relative to men from older to younger cohorts, the percent of educated women among all women has increased significantly across cohorts. Despite this improvement, however, the proportion of women who have four years of education, even among those 15-24 years of age, remains very low in Bangladesh, Egypt, Morocco, Pakistan, and most sub-Saharan African countries excluding Ghana, Kenya, Namibia, and Zambia.

Table 4.5 Educational status by residence and age

Percentage of women age 15-49 who have at least four years of education, and those who have at least some secondary or higher education, by residence and age, Demographic and Health Surveys, 1990-1994

Country	Percent with at least four years of education						Percent with at least some secondary education					
	Residence		Age (years)			Total	Residence		Age (years)			Total
	Urban	Rural	15-24	25-34	35-49		Urban	Rural	15-24	25-34	35-49	
Sub-Saharan Africa												
Burkina Faso	43.7	5.9	20.1	11.5	6.3	13.6	26.3	1.6	10.6	5.1	2.4	6.6
Cameroon	67.8	40.7	65.7	52.3	28.5	52.1	42.0	15.3	39.2	23.5	8.4	26.5
Ghana	78.7	46.7	71.1	58.7	43.9	58.8	21.2	3.6	11.5	10.2	8.9	10.3
Kenya	88.3	72.2	90.5	75.8	45.6	75.0	45.8	19.8	26.6	31.8	11.1	24.4
Madagascar	80.9	40.3	57.0	50.5	31.8	48.4	62.8	17.6	31.1	30.2	15.2	26.6
Malawi	U	U	43.9	33.5	20.8	34.2	U	U	5.3	5.0	2.3	4.4
Namibia	87.3	65.8	83.8	75.4	56.3	74.0	56.9	24.8	40.6	43.7	24.0	37.1
Niger	29.9	3.8	14.0	6.6	2.1	8.4	15.7	0.4	5.2	2.7	0.4	3.1
Nigeria	65.7	29.2	58.3	34.0	16.5	38.3	42.1	11.2	32.3	15.5	4.9	18.9
Rwanda	69.3	42.7	63.1	40.5	19.9	44.3	32.7	6.3	10.6	8.3	3.3	7.9
Senegal	46.6	6.8	32.1	20.9	13.3	23.5	21.6	1.6	12.3	10.4	5.8	9.9
Zambia	86.3	56.4	79.0	76.3	49.3	71.7	37.8	9.1	26.5	25.7	15.6	23.9
North Africa												
Egypt ¹	61.2	24.3	42.7	46.2	36.7	41.5	40.8	12.9	33.3	31.3	17.8	25.9
Morocco	53.3	9.3	42.4	28.3	16.8	30.9	36.2	3.9	28.5	18.0	8.9	19.8
Asia/Near East												
Bangladesh ¹	51.0	26.7	35.2	30.4	21.5	29.5	39.0	11.9	18.5	16.4	9.0	15.0
Indonesia ¹	76.2	52.9	77.6	61.7	48.2	59.7	41.3	11.2	24.0	21.9	16.0	20.0
Pakistan ¹	42.0	8.4	18.8	21.9	15.0	18.6	30.2	3.5	10.9	14.5	9.1	11.7
Philippines	96.3	90.2	96.4	93.9	89.9	93.7	76.2	54.3	79.3	68.0	49.5	66.7
Turkey ¹	74.2	55.6	80.3	75.2	53.7	67.5	24.9	4.3	19.6	20.8	13.3	17.5
Latin America/Caribbean												
Bolivia	81.8	47.5	85.1	71.4	45.9	68.9	67.4	22.1	65.9	52.1	29.1	50.4
Brazil	66.8	37.3	71.7	56.9	37.2	56.6	25.5	4.2	17.7	24.7	12.8	18.1
Colombia	85.5	56.3	86.6	81.2	61.8	78.0	65.1	23.7	62.9	58.8	37.3	54.5
Dominican Republic	86.6	64.4	88.6	79.3	64.7	79.6	52.4	21.3	48.7	49.0	23.9	42.5
Paraguay	90.6	72.1	89.8	85.0	70.5	82.5	53.4	13.8	43.2	38.8	24.0	36.1
Peru	90.2	57.2	92.6	84.4	67.5	82.8	76.8	27.2	78.3	65.6	47.8	65.6

¹ Ever-married sample of women

U = Unknown (not available)

Among the 12 African countries, there are five where not even 10 percent of women age 15-49 have at least some secondary education, while this proportion is about two-thirds in Peru and the Philippines. Further, even in urban areas, it is only in Madagascar, Namibia, the Philippines and all the Latin American and Caribbean countries except Brazil, that half or more women have at least secondary education. The rural area rates are even lower—15 percent or less of rural women in 15 countries, and between 15 and 30 percent in eight countries. Only in the Philippines do more than half of the rural women have secondary or higher education.

Not surprisingly, secondary education is also more common among the younger age groups than in the older age groups. However, the percent of women age 15-24 with some secondary education is one-third or less in all African and Asian countries except Cameroon, Namibia and the Philippines. In the Latin American countries by contrast, the proportion in this age group with some secondary education is 20 percent in Brazil, about 50 percent in the Dominican Republic and Paraguay, about two-thirds in Bolivia and Colombia, and 78 percent in Peru. These data also suggest an upward trend in women's education levels, but simultaneously reveal that much improvement is still needed.

However, education is only one indicator of women's awareness and ability to cope with the world. Next, some other indicators of women's exposure, awareness, and integration into the modern world are examined.

4.3 ADDITIONAL INDICATORS OF WOMEN'S EXPOSURE AND AWARENESS

In this section, other indicators of women's exposure to and awareness of the world around them are explored beginning with women's exposure to different forms of media. One element of women's empowerment and status is the ability to access and use information. Exposure to the media not only increases women's awareness of the world around them, but is also likely to be a major source of information, which equips them to better interpret and manipulate their environment. Table 4.6 presents data on the exposure of women in the reproductive ages 15-49 to three forms of media—television, radio, and newspaper—by urban and rural residence. Exposure to media is defined in most coun-

tries as exposure (watching, listening or reading depending on the type of media) at least once a week.²

There are large differences in exposure to the three forms of media by rural and urban residence and across countries. In 11 countries, even in urban areas, at least one in 10 women are not exposed to any type of media; and in Bangladesh, Cameroon, the Dominican Republic, Niger and Pakistan, 20-30 percent of urban women are not exposed to any source of media. By contrast, in all countries for which data are available, with the sole exception of the Philippines, more than 10 percent of rural women are not exposed to any kind of media. Indeed, in 13 countries, over 30 percent of women in rural areas are not exposed to any media source, and this proportion is above 60 percent in Burkina Faso, Cameroon, Madagascar, Niger, and Pakistan.

Exposure to all three forms of media is limited especially among rural women. Interestingly, in about half of the countries, women in urban areas are more likely to have exposure to any two types of media than to only one or all three. Urban women in Peru and the Philippines have the highest exposure to the media: over 70 percent of urban women in the reproductive ages have at least weekly exposure to television, radio, and the newspaper. In most countries, women in rural areas, if they are exposed at all, are most likely to have exposure to only one media form.

Another indirect indicator of women's awareness of and exposure to the modern world is migratory experience. Women who have ever migrated are more likely to have exposure to nontraditional ideas and ways of doing things than women who have never migrated or have lived in rural areas all their lives. "It [migration] is associated with profound changes in all of women's roles" (Adepoju, 1994). Thus, in Table 4.7, available indicators of migration for women age 15-49 are presented. Both rural to urban and urban to rural migration are examined since the process of migration itself is considered educational.

² There are some countries that are exceptions. In Colombia, Indonesia, and Paraguay, exposure to television and newspapers is weekly, but exposure to radio is in terms of daily listening. In Egypt, exposure to both television and radio is in terms of daily viewing and listening, respectively. Also note that for Cameroon, Malawi, and Nigeria, data were collected for exposure to two types of media only.

Table 4.6 Media exposure by residence

Percent distribution of women age 15-49 who have exposure to television, radio and newspaper, by residence, Demographic and Health Surveys, 1990-1994

Country	Urban household					Rural household				
	Exposure to combinations of television, radio and newspaper					Exposure to combinations of television, radio and newspaper				
	All three	Only two	Only one	None	Number	All three	Only two	Only one	None	Number
Sub-Saharan Africa										
Burkina Faso	19.6	32.7	30.3	17.4	1,285	0.1	2.2	32.2	65.5	5,009
Cameroon ¹	NA	47.5	23.3	29.3	1,615	NA	13.0	23.0	64.0	2,240
Ghana	19.7	39.3	26.9	14.1	1,717	3.5	14.1	34.2	48.2	2,830
Kenya	33.3	28.5	24.8	13.4	1,329	5.0	19.9	41.3	33.8	6,167
Madagascar	26.2	29.1	25.6	19.2	1,250	1.0	6.3	27.2	65.5	4,983
Malawi ²	NA	16.0 ^a	38.9 ^a	45.2 ^a	4,836 ^a	U	U	U	U	U
Namibia	46.0	30.3	17.9	5.8	2,071	4.2	34.2	43.3	18.3	3,333
Niger	14.6	32.4	27.7	25.3	1,122	0.2	4.3	30.0	65.5	5,360
Nigeria ¹	NA	63.7	22.2	14.3	2,187	NA	10.5	34.5	55.1	6,591
Senegal	22.6	43.5	24.2	9.8	2,621	1.4	11.6	47.6	39.3	3,670
Zambia	27.1	33.9	25.7	13.3	3,597	2.0	13.0	30.4	54.5	3,413
North Africa										
Egypt ^{3,4}	33.5	41.9	18.1	6.4	4,556	7.7	39.3	29.2	23.8	5,189
Morocco	36.5	48.1	11.1	4.4	4,522	4.6	30.2	37.8	27.4	4,692
Asia/Near East										
Bangladesh	17.0	32.0	25.1	26.0	1,096	1.9	8.6	30.6	58.9	8,399
Indonesia ³	41.2	36.6	15.4	6.7	6,684	12.1	29.8	29.4	28.8	16,178
Pakistan	18.5	30.6	25.8	25.1	2,007	2.2	8.3	16.3	73.3	4,571
Philippines	71.5	19.1	7.4	2.0	8,455	41.5	28.2	22.4	8.0	6,511
Turkey	49.5	33.7	13.0	3.8	4,176	20.2	44.5	24.4	10.9	2,336
Latin America/Caribbean										
Bolivia ³	49.5	35.2	11.7	3.6	5,350	5.7	15.3	42.7	36.3	3,203
Brazil	38.2	41.6	15.0	5.2	4,062	14.5	27.8	38.8	18.9	2,154
Colombia ³	49.3	35.9	11.7	3.0	6,315	23.4	38.8	26.4	11.4	2,164
Dominican Republic	9.4	32.6	37.4	20.5	4,990	1.7	23.6	36.8	37.9	2,305
Paraguay ³	65.0	26.7	7.0	1.3	3,269	32.6	33.2	24.1	10.1	2,546
Peru	73.1	19.9	5.2	1.8	12,270	14.9	25.7	38.3	21.1	3,546

¹ Exposure to only television and radio

² Exposure to only newspaper and radio

³ Exposure to radio in terms of daily rather than weekly listening

⁴ Exposure to television in terms of daily rather than weekly viewing

NA = Not applicable

U = Unknown (not available)

^a Exposure for all households (There is no rural-urban breakdown for Malawi.)

Table 4.7 Migration experience of women

Percent distribution of women age 15-49 by previous and childhood residence, percent of those who have never migrated, and mean percent of life spent in place of interview, Demographic and Health Surveys, 1990-1994

Country	Current residence: Urban						Current residence: Rural					
	Previous residence		Residence before age 12		Always lived in place of interview	Mean percent of life lived in place of interview	Previous residence		Residence before age 12		Always lived in place of interview	Mean percent of life lived in place of interview
	Urban	Rural	Urban	Rural			Urban	Rural	Urban	Rural		
Sub-Saharan Africa												
Burkina Faso	74.4	25.6	69.5	30.5	42.6	59.8	9.0	91.0	8.5	91.5	53.5	67.6
Cameroon	75.3	24.7	67.2	32.8	25.5	46.8	21.5	78.5	15.8	84.2	35.2	53.7
Ghana	87.0	13.0	82.8	17.2	30.6	52.6	38.4	61.6	27.3	72.7	33.4	53.3
Kenya	62.5	37.5	36.5	63.5	38.4	56.9	6.3	93.7	10.4	89.6	68.9	78.1
Madagascar	85.7	14.3	79.9	20.1	37.5	53.6	15.3	84.7	19.9	80.1	46.9	61.8
Namibia	72.7	27.3	54.5	45.5	49.1	63.1	3.5	96.5	4.2	95.8	75.7	81.8
Niger ²	91.6	8.4	63.1	36.9	42.6	58.7	46.5	53.5	4.2	95.8	50.1	67.0
Nigeria	88.3	11.7	76.8	23.2	56.5	69.7	11.7	88.3	14.3	85.7	71.3	79.8
Rwanda	55.5	44.5	39.8	60.2	24.7	38.8	1.7	98.3	1.5	98.5	39.7	58.7
Senegal	79.3	20.7	77.1	22.9	54.1	68.6	14.0	86.0	10.2	89.8	42.2	60.9
Zambia	83.2	16.8	68.4	31.6	20.1	36.9	19.1	80.9	21.8	78.2	28.0	43.0
North Africa												
Egypt ¹	83.7	16.3	81.8	18.2	54.4	70.1	8.4	91.6	7.4	92.6	74.7	83.5
Morocco	79.1	20.9	70.4	29.6	39.6	56.6	6.9	93.1	7.2	92.8	49.8	64.8
Asia/Near East												
Bangladesh ¹	61.8	38.2	U	U	15.0	38.0	4.8	95.2	U	U	22.1	54.3
Indonesia ¹	U	U	53.5	46.5	U	U	U	U	5.9	94.1	U	U
Pakistan ¹	74.0	26.0	67.4	32.6	36.6	55.9	5.9	94.1	6.3	93.7	58.6	71.8
Philippines ²	79.2	20.8	54.0	46.0	43.4	57.7	12.2	87.8	12.1	87.9	61.4	72.7
Turkey ^{1,3}	U	U	55.3	44.7	31.7	53.6	U	U	9.5	90.5	55.4	69.5
Latin America/Caribbean												
Bolivia	U	U	86.8	13.2	U	U	U	U	28.1	71.9	U	U
Brazil	93.0	7.0	71.2	28.8	46.3	63.8	29.2	70.8	15.9	84.1	64.4	74.2
Colombia	86.9	13.1	81.7	18.3	43.6	61.6	32.1	67.9	27.1	72.9	42.7	55.2
Dominican Republic	78.7	21.3	69.4	30.6	53.4	67.6	24.8	75.2	17.8	82.2	52.5	61.9
Paraguay	91.7	8.3	82.5	17.5	55.8	65.6	16.9	83.1	23.1	76.9	66.0	75.2
Peru	92.6	7.4	89.7	10.3	52.8	69.0	23.8	76.2	36.8	63.2	61.5	70.8

Note: Visitors to the community were excluded in sub-Saharan African countries, Pakistan, and Bangladesh. Residence abroad was grouped with urban for previous and childhood residence.

¹ Only ever-married women

² Niger and the Philippines have between 2 percent and 4 percent missing responses.

³ Urban was defined as province center and district center, while rural was defined as sub-district or village.

U = Unknown (not available)

In most countries, at least three out of four women currently residing in urban areas have also lived previously in the same or another urban area. There are only seven countries where one-fourth or more of the women currently living in urban areas moved there from a rural area; and in only three countries—Bangladesh, Kenya, and Rwanda—the proportion of rural-urban migrants is more than one-third of women currently living in urban areas. Similarly, in

16 countries, more than two-thirds of women currently living in urban areas, also lived in an urban area before the age of 12. However, in about half of the countries, including Kenya and Rwanda, more than 30 percent of those currently living in urban areas had a rural childhood.

As compared with the proportion of women living in urban areas whose previous residence was urban, women

currently living in rural areas have a greater likelihood that their previous residence was rural. This is particularly true in most of the sub-Saharan African countries, in all the Asian countries, and in the two North African countries. In these countries, the percent of current rural residents who also lived previously in rural areas ranges from about three-fourths to well over 90 percent. In all of the Latin American countries other than Paraguay, approximately one-fourth to one-third of current rural residents had moved there from an urban area. Further, in 19 countries, over three-fourths of current rural residents had a rural childhood and this proportion is about 90 percent or more in 11 countries.

Also, women currently living in rural areas are on average much more likely to have always lived in the place of interview, and have spent a higher percentage of their life in the place of interview, than women currently living in urban areas. The only exceptions are Colombia, the Dominican Republic, and Senegal. Note that the estimates of migration for Bangladesh, Egypt, Pakistan, and Turkey which are based on a sample of ever-married women are likely to be biased when compared with migration estimates based on a sample of all women. The exclusion of never-married women allows a disproportionate weight to be placed on women who moved only at the time of marriage to live with their husbands.

From these results, it appears that only a small proportion of women migrate, especially out of rural areas. Consequently, this source of exposure for women is limited in most countries.

Yet another way of evaluating women's exposure to nontraditional ways of doing things and their degree of control over their own lives is to examine some demographic outcome variables. Thus, the degree to which women appear to be in control of their own bodies and fertility needs exploration. Reproductive choice is crucial to women's ability to make choices about other aspects of their lives such as education, employment and health (McCauley et al., 1994). Table 4.8 contains several different indicators that illustrate such control and awareness.

First, the extent to which women have ever discussed their desired number of children with their husbands is examined. The proportion of all currently married women (except those who are sterilized or have a husband who is sterilized) who have discussed the number of children they want with their husband varies across all countries. The lowest proportions are found in Burkina Faso, Niger, and

Senegal where only 10-20 percent of women have had such discussions. In most other sub-Saharan countries as well as in Egypt and Pakistan, the proportion tends to be between one-fourth and one-half of all women. Only Kenya, Madagascar, and Morocco in Africa rank with the other countries of Asia and Latin America, where the proportion tends to be 60 percent or more. Peru has the highest proportion of women—almost 9 out of 10—who have discussed their desired number of children with their husbands.

Knowledge of the ovulatory cycle and of modern methods of contraception are more direct measures of women's control and awareness of their bodies and fertility. A woman is considered to have knowledge of the ovulatory cycle if she is aware that a woman has the greatest chance of becoming pregnant "in the middle of her cycle." Table 4.8 shows that the proportion of women who answer correctly is 25 percent or less in almost all countries. In only Cameroon, Ghana, Madagascar, and Paraguay, the proportion giving the correct answer is between 25 and 30 percent of all women, and in Colombia and Peru it is between one-third and half of all women. These numbers are extremely low, and if correct,³ reflect a disturbingly low level of awareness about the workings of the female body.

By contrast, information about contraceptive methods is fairly widespread. In all countries except Madagascar, Niger, and Nigeria, the percent of all women who knew of three or more contraceptive methods was greater than 50 percent. In more than half of the countries, including all of the Asian ones except Pakistan and all of the Latin American and Caribbean countries except Bolivia, the proportion is greater than 80 percent.

³ The way in which the questions related to correct knowledge of the ovulatory cycle are asked leaves some room for doubt. Two questions are used to elicit this information. The wording used in most countries for the first question is "Between the first day of a woman's period (i.e., menstrual cycle) and the first day of her next period, are there certain times when she has a greater chance of becoming pregnant than other times?" If women say yes to this question, they are asked: "During which times of the monthly cycle does a woman have the greatest chance of becoming pregnant?" Although the questions refer to "any woman," the respondent is likely to interpret them with reference to her own experience. Thus, the answer to the second question will depend on what a woman understands to be her "monthly cycle." If the woman has irregular cycles, she may be unsure. Further, a response such as "middle of the cycle" is critically dependent on what she perceives to be the beginning and end of the cycle. Therefore, these statistics are likely to be more reflective of a lower bound rather than an average. Also, note that the percent of women with knowledge of the ovulatory cycle tends to be higher among women who are currently using periodic abstinence as a contraceptive method.

Table 4.8 Reproductive choice

Percentage of currently married women and all women according to selected reproductive choice variables reflective of awareness, Demographic and Health Surveys, 1990-1994

Country	Currently married women ¹	All women		
	Discussed number of children with husband	Knowledge of ovulatory cycle	Knowledge of 3 or more contraceptive methods	Ever used a modern contraceptive method
Sub-Saharan Africa				
Burkina Faso	15.5	8.8	51.2	9.9
Cameroon	28.0	26.3	54.0	15.7
Ghana	48.4	28.4	82.3	29.5
Kenya	62.4	20.1	90.2	34.0
Madagascar	57.3	28.1	40.2	8.3
Malawi	35.8	12.2	75.6	16.9
Namibia	49.5	7.8	72.0	37.1
Niger	17.0	10.9	43.2	4.4
Nigeria	23.2	20.1	31.2	8.8
Rwanda	52.0	18.4	92.2	16.8
Senegal	10.7	9.9	53.4	10.2
Zambia	44.2	13.7	72.1	22.9
North Africa				
Egypt	46.1	17.3	93.8	62.9
Morocco	65.5	13.7	85.3	36.8
Asia/Near East				
Bangladesh	76.4	U	98.7	57.0
Indonesia	60.3	12.0	83.5	64.1
Pakistan	33.8	5.2	63.3	16.0
Philippines	78.6	23.5	92.3	27.7
Turkey	69.4	22.4	94.6	61.2
Latin America/Caribbean				
Bolivia	75.7	11.2	68.0	22.2
Brazil	62.4	14.1	94.0	50.9
Colombia	71.1	35.7	95.1	52.2
Dominican Republic	77.4	23.2	98.5	52.5
Paraguay	72.9	25.7	87.7	42.0
Peru	86.7	46.5	89.8	35.8

¹ Only those women who are not sterilized and whose partner is not sterilized
 U = Unknown (not available)

Finally, the proportion of women who have ever used a modern contraceptive method is also examined. Clearly, this proportion is lower than the proportion who have knowledge of contraceptive methods in every country. Indeed, there are five countries, all in sub-Saharan Africa where

ever use of a modern contraceptive method is 10 percent or less and only two—Kenya and Namibia—where about one in three women have ever used a modern contraceptive method. Other countries where the proportion of women who have ever used a modern contraceptive is about one-

third or less are Bolivia, Morocco, Pakistan, Peru, and the Philippines. In the remaining Asian countries and in Brazil, Colombia, and the Dominican Republic, the percent of women who have ever used a modern method lies between 50 and 65 percent. Indonesia, with 64 percent of all women having ever used a modern contraceptive method, has the highest percent of ever use.

The analysis in this chapter has revealed that some progress is being made in improving women's capacity to cope with the modern world, both in terms of education and contraception. However, women are less likely to be edu-

cated than men in most countries and changes across age cohorts reveal that there is no consistent improvement in closing this gap over time. In several countries, especially in sub-Saharan Africa, the proportion of women without any education continues to be extremely high. Even when women do receive education, the quality and quantity is often such that the minimal requirement of literacy is not always fulfilled. Finally, even in countries where at least four years of education are fairly common among women, the proportion who receive secondary or higher education remains limited.