

Chapter 3

Data on Adolescents for Program Planning: What We Need, What We Have, and Where to Find It

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Designing effective programs for adolescents is part art and part science. The art—striking a balance between program creativity, human resources, and timing—can be learned; so, too, can the science, with tangible results. Using data as a foundation for formulating each step of an intervention can help to ensure that the programming “canvas” is properly primed.

While there may appear to be a plethora of information on adolescents’ lives, it can be difficult to find sources that explicitly address the diversity of adolescent populations and that examine aspects of their existence other than contraceptive knowledge, attitudes, and practice. The data that do exist generally have been reported in broad categories that fail to provide a clear picture of the many subsets of the adolescent population within and across countries. Yet, *gathering information on particular target populations of adolescents—data detailing diverse aspects of these adolescents’ lives—is essential for developing appropriate programs for them.* Key considerations include:

- Gender—What differentiates the experience of adolescent boys and girls?
- Age—What are the differences in the experience of older and younger adolescents?
- Urban/rural residence—What percentage of boys and girls live in rural versus urban areas? Is this ratio skewed by migration patterns in some communities?
- Living arrangements—With whom do adolescents reside? One parent? Both parents? A relative? A “relative” so distant that s/he was not known to an adolescent prior to taking up residence? An employer?

- Schooling status—How many girls and boys are in school? How many have finished their formal schooling? At what grade levels can we find adolescents?
- Activity/work status—What is the work experience of adolescents? How many work for income? What is the relationship between adolescents' work and schooling status?
- Sexuality, marital/childbearing status, and reproductive health status—What percentage of girls are unmarried, promised for marriage, and married? To what extent do girls' and boys' sexual experience and childbearing take place inside or outside of marriage? What is the extent of childbearing among adolescents?

Gender

While girls and boys no doubt spend their first decade observing gender differences, it is during the second decade of their lives—adolescence—that gender roles become most pronounced. There are obvious biological phenomena that make this inevitable, but cultural factors are also responsible. *The increasingly differential experience of boys and girls during adolescence requires that any data on 10–19-year-olds must separate girls and boys.*

Age

During adolescence, changes in social status and maturity—both physical and emotional—can occur rapidly. Differences in the experience and life situation of a 12-year-old boy and a 13-year-old girl—or even 12- and 13-year-olds of the same gender—can be staggering. It is, therefore, necessary to consider age differences within and between each gender group.

As adolescence progresses, differences between boys and girls become more pronounced—and so do the differences within each gender group. By way of example, imagine this: a rural village in which there is a primary school that provides up to four

years of schooling. Girls generally enter this school at age 10, and those that finish do so when they are 14. In this village, the life of a school-going 14-year-old girl will differ considerably from that of her out-of-school 15-year-old friends and sisters.

Demographic data on adolescents are commonly broken down into two age groups: 10–14-year-olds and 15–19-year-olds. These are the breakdowns used by the Demographic and Health Surveys (DHS) and UNAIDS, and in UNICEF’s Multiple Indicator Cluster Surveys (MICS).

Gender and age differences should always be considered whenever data on adolescents are collected and reported. The table below can be endlessly expanded to account for other equally important aspects of adolescents’ lives (elaborated below).

Simple Table

Age	Girls	Boys
10–14		
15–19		

Expanded Table

Urban/rural residence	Girls		Boys	
	ages 10–14	ages 15–19	ages 10–14	ages 15–19
Rural				
Urban				

The effect of age heaping

Although dividing 10–19-year-olds into two age groups is much more descriptive than lumping them into one, it can still mask the significant diversity among adolescents in each age group. This is sometimes the result of “age heaping”: clustering data on individuals with similar characteristics—including age—into multi-year age groups where the individuals’ age-specific characteristics become less visible. The effect of age

heaping can be seen in the following example. Consider urban/rural population distributions (more on this subject below) for 10–14- and 15–19-year-old boys in Togo and Mozambique:

**Rural/Urban Residence of Boys Aged 10–14 and 15–19 in Togo and Mozambique
(percent distribution)**

	Togo		Mozambique	
Boys	Rural	Urban	Rural	Urban
ages 10–14	72	28	78	22
ages 15–19	66	34	65	35

Source: Demographic and Health Surveys

For argument’s sake, assume that in both of these countries older boys migrate from their rural homes to nearby urban centers (to work, or for military training, or perhaps even to attend school). Assume further that it is only the 17–19-year-olds who migrate. It is possible, therefore, that the 15- and 16-year-olds actually have living patterns much more like those in the 10–14-year age group than like those of older members of their age group (15–19 years). Similarly, the 17-, 18-, and 19-year-olds may have living patterns that are even more unlike those in the 10–14-year age group than the 6 percent difference in Togo and 13 percent difference in Mozambique would suggest. This reality is obscured by the age heaping effect of the data presented above.

Urban/Rural Residence

Whether an adolescent lives in an urban center or in a rural village can have enormous implications for her or his life. This fact is not always recognized by program planners. There is often a discrepancy between adolescents’ (and younger children’s) access to schooling in rural and urban areas: the latter usually offer more educational

opportunities at all levels (primary, secondary, and even tertiary) to boys and girls alike (see Chapter 4a).

Average age at marriage typically varies between rural and urban areas—and this can make the trajectory of adolescence very different for rural and urban youth, especially girls. In Ethiopia, for instance, 21 percent of women aged 20–24 surveyed in rural areas for the 2000 DHS reported that they were married by age 15; 53 percent of them were married by age 18. In contrast, only 11 percent of women aged 20–24 surveyed in urban areas of Ethiopia reported that they were married by age 15, and only 32 percent were married by age 18. These differences are even clearer among 20–24-year-old women living in Addis Ababa: only 7 percent reported having been married by age 15, and only 17 percent were married by age 18 (2000 Ethiopia DHS). (See below for a discussion of adolescent girls’ marital status in relation to their sexual activity.)

Access to health care, exposure to the media, work opportunities, a sense of safety and security in public spaces, sexual initiation, and cultural norms regarding girls’ mobility outside the home are all domains that vary, often dramatically, between rural and urban settings—even within the radius of a few kilometers that may divide an urban and rural area. *A program targeting adolescents must understand and anticipate the differential experience of urban and rural youth.*

Living Arrangements

With whom adolescents reside is also a significant factor affecting their experience. The reality is that not all adolescents live with both of their parents; in fact, some (in some places a significant number) adolescents live with neither parent, as the table below shows.

**Living Arrangements of Adolescents Aged 10–14,
by Parents Resident in Household
(percent distribution)**

Country (date of DHS survey)	Both parents in household	Father only in household	Mother only in household	Neither parent in household
<u>Benin</u> (1996)				
Girls	46	9	13	32
Boys	57	14	11	18
<u>Ghana</u> (1998)				
Girls	39	8	24	29
Boys	43	9	27	21
<u>Jordan</u> (1997)				
Girls	87	2	8	3
Boys	89	2	7	2
<u>Malawi</u> (1992)				
Girls	49	4	21	26
Boys	53	4	19	24
<u>Senegal</u> (1992–93)				
Girls	57	3	18	22
Boys	57	7	15	21

Source: Demographic and Health Surveys

Whether an adolescent lives with one, both, or neither parent has implications for the level of investment that is made in that adolescent (this includes, but is not limited to, payment of school fees). The number of parents resident in a household may affect adolescent girls and boys differentially. In one-parent households, adolescent girls may bear greater responsibility for domestic tasks than adolescent boys—a relationship that is usually already disproportionate (Mensch, Bruce, and Greene 1998). The status of an adolescent living in a household with neither parent may not be equal to that of other children in the household (particularly if the adolescent is a distant family member or has no blood ties to those in the household); as a result, s/he may receive a smaller share of the resources devoted to children in the household. In some instances, adolescents living with neither parent are actually living with an employer—an arrangement that can be exploitative and even dangerous.

Programs that intend to reach adolescents through their parents, or to include parents in an initiative, need to determine what percentage of their target population is, in fact, living with a parent or parents. Program planners need to think critically about how to include adolescents who live with neither parent. These adolescents are potentially more vulnerable than those living with one or both parents.

Where to find information on adolescents' living arrangements

Data on living arrangements can be difficult to find. Large-scale national surveys tend to collect data on households—an overarching category that can make it difficult to tease out familial living arrangements. Examining variables such as parental residence and survivorship (both parents living, only mother living, only father living) can sometimes be helpful.

Sources for data on adolescents' living arrangements include the Demographic and Health Surveys (see last section of this paper) and the World Bank's Living Standards Measurement Surveys (see World Bank web site, www.worldbank.org).

Schooling Status

While in principle schools may seem like good places to base programs for adolescents, in reality the majority of adolescents in many developing countries are not (and may never be) in secondary school; indeed, they may be in primary school—if they are in school at all (see table below). *School-based programming must consider the percentage of adolescents who are actually in school and, of those who are, what percentage are in primary versus secondary school, as well as the gender composition of*

enrollment. (For a discussion of adolescent girls' schooling experience in developing countries, see Chapter 4b.)

**Current School Enrollment of Adolescent Girls and Boys
(percent distribution)**

Girls and boys, by age (date of DHS survey)	Not in school	In primary school	In secondary school	In post-secondary school
<u>Girls aged 10–14</u>				
Bangladesh (1996–97)	28	52	20	0
Bénin (1996)	68	30	2	0
Jordan (1997)	3	54	43	0
Mali (1995–96)	77	22	1	0
Pakistan (1990–91)	55	30	15	0
<u>Girls aged 15–19</u>				
Bangladesh (1996–97)	70	5	20	5
Bénin (1996)	84	7	9	0
Jordan (1997)	29	1	63	7
Mali (1995–96)	89	4	7	0
Pakistan (1990–91)	79	3	17	1
<u>Boys aged 10–14</u>				
Bangladesh (1996–97)	29	53	18	0
Bénin (1996)	41	55	4	0
Jordan (1997)	3	53	44	0
Mali (1995–96)	65	33	2	0
Pakistan (1990–91)	31	46	23	0
<u>Boys aged 15–19</u>				
Bangladesh (1996–97)	55	7	30	8
Bénin (1996)	64	16	20	0
Jordan (1997)	34	0	61	5
Mali (1995–96)	77	9	14	0
Pakistan (1990–91)	56	5	38	1

Source: Demographic and Health Surveys

Activity/Work Status

Adolescents work. While some of the work they perform is not remunerated (including domestic labor and agricultural work for their families), adolescents commonly work for pay as well. Adolescents' access to safely earned income and savings

can influence whether or not they attend school, their age at marriage, and their family's nutritional and economic status. It may also reduce or eliminate their (especially girls') reliance on "survival sex"—i.e., sex in exchange for help or gifts—(with its associated risk of HIV infection) to meet basic needs, such as buying food and paying school fees.

It is difficult to determine exactly how many adolescents are wage earners. Despite extremely conscientious and thorough efforts to gather information on adolescents' paid work patterns (especially on the part of the International Labour Organization), it is all but impossible to capture an accurate snapshot of adolescents' workforce participation because so much of it is informal, unremunerated, hidden, or seasonal. Various approaches to estimating the percentage of children working in wage-earning jobs have been suggested. These include learning the number of children who have finished their schooling, and looking at industries in which children are likely to be concentrated (Mensch, Bruce, and Greene 1998).

Data show that girls in a variety of schooling, marital, and childbearing categories work for pay (see table in Chapter 8a). In some countries, married adolescents with children comprise the largest percentage of employed 15–19-year-old girls. While advocates of children's rights sometimes lament that kids drop out of school to work, the data show that adolescent girls often work *and* go to school (see table below). The hours of a school day are locally determined, and school days are often short (perhaps only three or four hours), making it feasible for students to both study and work. Sometimes girls' ability to earn income is what *allows* them to stay in school: without girls' financial contributions, families under acute economic pressure are known to keep their daughters out of school. Also of interest in the table below, is the activity/work status of married

adolescents. Many of them work, almost none go to school, and the arrival of children usually increases the percentage working.

**Schooling and Work Status of 15–19-Year-Old Girls,
by Marital and Childbearing Status
(percent distribution)**

Marital and childbearing status (date of DHS survey)	Not in school, not working	In school only	Working only	In school and working
<u>Unmarried without children</u>				
Benin (1996)	19	17	59	5
Brazil (1996)	12	53	12	23
Malawi (1992)	36	45	11	8
Uganda (1995)	25	32	31	12
<u>Unmarried with children</u>				
Benin (1996)	32	0	62	6
Brazil (1996)	44	17	26	13
Malawi (1992)	68	9	18	5
Uganda (1995)	41	1	58	0
<u>Married without children</u>				
Benin (1996)	27	0	73	0
Brazil (1996)	60	10	27	3
Malawi (1992)	80	2	17	1
Uganda (1995-2001)	50	2	48	0
<u>Married with children</u>				
Benin (1996)	13	0	87	0
Brazil (1996)	74	8	16	2
Malawi (1992)	80	1	19	0
Uganda (1995-6)	46	0	54	0

Source: Demographic and Health Surveys

Sources of information about adolescents' work status and livelihoods

The following sources of information offer insights into the work status and livelihoods of adolescents in developing countries:

- *Adolescent Girls' Livelihoods: Essential Questions, Essential Tools—A Report on a Workshop*. This Population Council publication is available on the organization's web site (www.popcouncil.org) and from Debra Warn (dwarn@popcouncil.org).

- *Making It Work: Linking Youth Reproductive Health and Livelihoods*. This publication by the International Center for Research on Women presents a review of programs that link adolescent reproductive health with livelihood interventions. The report can be downloaded from the organization's web site (www.icrw.org).
- *Meeting the Youth Employment Challenge: A Guide for Employers*. International Labour Office, 2001.

Data on adolescent boys' and girls' sexuality—to the extent that these data exist at all—are not always reliable. It is difficult to elicit truthful answers to survey questions addressing this sensitive subject. In keeping with cultural norms and expectations surrounding sexual initiation, boys are thought to overreport their sexual experiences, while girls are believed to underreport theirs. On the other hand, in parts of the world undergoing rapid social change, or in subcultures in which women's sexual prowess is not taboo, it could be that girls also overreport their sexual experiences.

Another obstacle to obtaining accurate information about adolescents' sexual experience is that surveys often treat this experience as a yes/no category: a respondent either has (or has had) penetrative vaginal intercourse or s/he has not. Surveys typically do not take into account the full spectrum of sexual practices, some of which carry reproductive health risks (anal and oral sex, for instance).

Researchers have generally overlooked early stages in the process of gaining sexual experience (e.g., kissing and petting); in doing so, they miss the opportunity to understand the larger context and timing of adolescent sexual initiation—information that could yield more effective interventions, particularly among younger adolescents.

In developed countries, where nearly all teenaged mothers are unmarried and often held in low regard, a national figure showing that 34 percent of all 15–19-year-old girls have had at least one child would be considered scandalous. The reality in the

developing world is considerably different, however. In Mali, 34 percent of all 15–19-year-old girls *have* given birth. If one looks only at married 15–19 year-old girls, the percentage who have had at least one child increases to 59 percent—and those who have yet to do so are likely under great pressure to become pregnant as soon as possible.

Among unmarried 15–19-year-old girls in Mali, only 9 percent have ever given birth (1998 Mali DHS). This indicates that while childbearing among unmarried adolescent girls does exist in this society, childbearing occurs predominantly among married girls—indeed, it is encouraged. This pattern typifies adolescent childbearing patterns in a significant number of other developing countries as well (see Chapter 9) (Mensch, Bruce, and Greene 1998: Chapter 3, pp 60-76).

One of the most important pieces of information that program planners can glean from data on adolescent sexuality and childbearing is the percentage of sexual activity and childbearing that takes place within marriage and the percentage that takes place outside of marriage. For example, in Burkina Faso, 54 percent of girls aged 15–19 report having had sexual intercourse. If one examines the marital status of these girls, one learns that among 15–19-year-old girls who have never been married, less than 20 percent have ever had sex. This suggests that the majority of girls this age who have had sex are married. The same data set (1998 Burkina Faso DHS) shows that 7.7 percent of unmarried 15–19-year-old girls and 51 percent of married girls that age reported that they were sexually active at the time of the survey (defined as having had sex in the past 28 days). The data also show that 84 percent of sexually active girls in Burkina Faso are married. Furthermore, married adolescent girls were 2.5 times more likely to report sex within the last week compared to unmarried adolescent girls. This underscores that most sexual activity among adolescent girls in Burkina Faso takes place within marriage.

The situation in Togo, on the other hand, looks somewhat different. In contrast to Burkina Faso, only 34 percent of sexual activity among adolescents in Togo takes place within marriage; the majority of it occurs among unmarried girls, 20 percent of whom reported being sexually active. Forty-five percent of married girls reported being sexually active (1998 Togo DHS). While the overall picture of girls' sexual experience varies quite dramatically between Togo and Burkina Faso, one pattern is consistent: a larger percentage of married 15–19-year-old girls are sexually active compared to their unmarried counterparts. This fact should not be a surprise—indeed, it should be expected—yet it has often been ignored.

To plan effective reproductive and sexual health education and service programs, it is essential to consider the distinctive needs, social networks, and access to services of married versus unmarried adolescents. Typically, unmarried girls want to avoid both pregnancy and disease, while married girls are likely to need disease-prevention strategies and prenatal/postpartum care, and far fewer will be seeking contraceptive services. In some countries married girls actually know less about prevention of sexually transmitted diseases, including HIV infection/AIDS, than do their unmarried and less sexually active counterparts. The table below illustrates this phenomenon (see also Chapter 9).

**15-19-Year-Old Girls' Reproductive Health Knowledge
(percent distribution)**

Country (year of DHS survey)	Has heard of a modern contraceptive method		Has heard of HIV/AIDS		Percent of sexually active girls who are married
	Never-married	Ever-married	Never-married	Ever-married	
Mozambique (1997)	54	45	82	81	69
Cameroon (1998)	83	72	92	86	60
Senegal (1997)	73	69	92	85	91
Benin (1996)	69	66	84	79	59
Niger (1998)	65	68	68	45	98

source: Demographic and Health Surveys

Sources of Information on Adolescents' Lives

In addition to sources cited earlier in this paper, the following sources provide useful data on adolescents' lives:

Country-level census data

Virtually every country has a national census that can be used to assist in local program planning exercises. There are also myriad household surveys yielding data on labor-force participation and poverty measures. Such data should be available through the government ministry responsible for statistics (which varies from country to country).

UNAIDS

The UNAIDS web site (www.unaids.org) is a growing resource for country-level information on adolescents and HIV/AIDS.

Living Standards Measurement Surveys (LSMS)

The LSMS are country-level household surveys sponsored in part by the World Bank and available through their web site (www.worldbank.org). These surveys contain data on key poverty indicators.

Demographic and Health Surveys and Population Council tables presenting disaggregated DHS data on adolescents

The DHS is nationally representative and conducted in over 60 countries. Information is available at their web site (www.macroint.com). The DHS data are not specifically collected on adolescents, but the DHS contain ample data to draw out a sense of their lives and experiences. The Population Council has done just this by generating 14

tables that present disaggregated data on adolescents in 46 DHS countries. These

countries include (by region):

East and Southern Africa

Comoros, 1996
Ethiopia, 2000
Kenya, 1998
Madagascar, 1997
Malawi, 1992
Mozambique, 1997
Namibia, 1992
Rwanda, 1992
Tanzania, 1996
Uganda, 1995
Zambia, 1996
Zimbabwe, 1994

West and Central Africa

Benin, 1996 (Eng/Fr)
Burkina Faso, 1993 (Eng/Fr)
Cameroon, 1998 (Eng/Fr)
Central African Republic, 1994 (Eng/Fr)
Chad, 1996 (Eng/Fr)
Côte d'Ivoire, 1994 (Eng/Fr)
Ghana, 1998
Mali, 1996 (Eng/Fr)
Morocco, 1992 (Eng/Fr)
Niger, 1998 (Eng/Fr)
Nigeria, 1990
Senegal, 1992–93 and 1997 (Eng/Fr)
Togo, 1998 (Eng/Fr)

Latin America/Caribbean

Bolivia, 1998
Brazil, 1996
Colombia, 1995
Dominican Republic, 1996
Guatemala, 1995
Haiti, 1994
Nicaragua, 1998
Paraguay, 1990
Peru, 1996

West Asia and North Africa

Egypt, 1996
Jordan, 1997
Kazakhstan, 1995
Kyrgyzstan, 1997
Pakistan, 1991
Turkey, 1993
Uzbekistan, 1996
Yemen, 1992

South and East Asia

Bangladesh, 1996
India, 1992
Indonesia, 1997
Nepal, 1996
Philippines, 1998

The Population Council tables presenting disaggregated DHS data on adolescents (by country) are:

Table 1	Urban-Rural Residence and Population Distribution
Table 2	Parental Survival Status and Residence in Household
Table 3	Characteristics of Head of Household
Table 4	Educational Enrollment and Attainment
Table 5	Educational Enrollment and Attainment in Urban Areas
Table 6	Educational Enrollment and Attainment in Rural Areas
Table 7	Educational Enrollment in Urban and Rural Areas: Comparison Summary
Table 8	Marital Status
Table 9	Sexuality and Childbearing

Table 10	Educational Enrollment and Work Status
Table 11	Awareness and Use of Modern Contraceptive Methods
Table 12	Awareness of HIV/AIDS
Table 13	Experience with Sexually Transmitted Diseases
Table 14	Female Genital Circumcision

Tables in this chapter were compiled from the tables listed above, which are available on the Population Council's web site. Hard copies can also be obtained by e-mailing Erica Chong at the Population Council (echong@popcouncil.org).

References/Resources

Mensch, Barbara S., Judith Bruce, and Margaret E. Greene. 1998. *The Uncharted Passage: Girls' Adolescence in the Developing World*. New York: Population Council.

Adolescent Girls' Livelihoods: Essential Questions, Essential Tools—A Report on a Workshop

Making It Work: Linking Youth Reproductive Health and Livelihoods

www.unaids.org

International Labour Organization (ILO). 2001. *Meeting the Youth Employment Challenge: A Guide for Employers*. Geneva: ILO.

Population Council tables presenting disaggregated DHS data on adolescents, www.popcouncil.org

www.worldbank.org