DIRECTIONS IN DEVELOPMENT
Human Development

Youth at Risk in Latin America and the Caribbean

Understanding the Causes, Realizing the Potential

Wendy Cunningham, Linda McGinnis, Rodrigo García Verdú,
Cornelia Tesliuc, and Dorte Verner

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1 2 3 4 5 11 10 09 08

ISBN-13: 978-0-8213-7520-4
eISBN-13: 978-0-8213-7521-1
DOI: 10.1596/978-0-8213-7520-4

Library of Congress Cataloging-in-Publication Data

Youth at risk in Latin America and the Caribbean : understanding the causes, realizing the potential / Wendy Cunningham ... [et al.].
p. cm.
Includes bibliographical references.
ISBN 978-0-8213-7520-4 (print) — ISBN 978-0-8213-7521-1 (electronic)
1. Youth with social disabilities—Latin America. 2. Youth with social disabilities—Services for—Latin America. 3. Youth with social disabilities—Caribbean Area. 4. Youth with social disabilities—Services for—Caribbean Area. I. Cunningham, Wendy V.

HV1441.L38Y68 2008
362.74098—dc22 2008013547

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Acknowledgments

This report was prepared by a cross-sectoral Bank team consisting of Wendy Cunningham (team leader), Linda McGinnis, Rodrigo García-Verdú, Peter Holland, Cornelia Tesliuc, and Dorte Verner. Background papers were prepared by Emilie Bagby, Omar del Valle, Leila Farivar, Stefano Bertozzi, and Juan Pablo Gutiérrez, but learning was drawn from a much larger team of researchers who have engaged with the Bank over the past several years. Research assistance was provided by Guillermo Raul Beylis, Lorena Cohan, Edwin Goñi, Stanislao Maldonado, and Susanna Shapiro. The study was prepared under the guidance of Guillermo Perry, Helena Ribe, and Evangeline Javier. Tito Cordella, Keith Hansen, and Jennie Litvack also provided useful feedback. Peer reviewers for the study were Cristobal Ridao-Cano, Carine Clert, Andrew Morrison, and Jacqueline Mazza. Special thanks go to the experts on youth development who came together to develop the policy section—Robert Blum, Gary Barker, Andrew Hahn, Paul Ryan, Miguel Jaramillo, Ernesto Schifelbein, Mary Arends-Keunning, Andrea Ferro, Deborah Levison, Rodrigo Guerrero, Nancy Guerra, and Anthony Ramirez—and to friends who guided us through the process, including Matilde Maddaleno (PAHO), Paul Gertler (HDNVP), and Emmanuel Jimenez (Director, WDR 2007). Karla McEvoy ushered the manuscript through its final publication stages. Special recognition goes to Fiona MacKintosh, who edited the report.

Overview

Realizing the potential of Latin America and the Caribbean's youth is essential not only to their well-being, but also to the long-term welfare of the whole region. Young people's families, communities, and governments—as well as private, nonprofit, and international organizations—have a responsibility to help youth reach their potential. There have been many successes but also important failures. How to build on the successes and correct the failures is the subject of this report.

Young people are generally perceived as the source of many problems plaguing the Latin American and Caribbean (LAC) region today. Crime, violence, and illegal drugs are permeating the region. Youth unemployment rates are reaching new highs, and girls are giving birth at younger and younger ages, putting enormous financial and psychological costs on young people and on their societies. Recent initiatives by young people in the region have shown how the youth of LAC can be productive and contributing members of society. But governments, often more concerned about those who are not successfully navigating the youth years, repeatedly ask for advice from international experts about how best to support them.

This book has two objectives: to identify the at-risk youth in LAC, and to provide evidence-based guidance to policy makers in LAC countries

that will help them to increase the effectiveness and efficiency of their youth investments. The book concludes that governments can be more effective in preventing young people from engaging in risky behavior in the first place and also in assisting those who already are engaged in negative behavior. To support governments in this endeavor, the book provides a set of tools to inform and guide policy makers as they reform and implement programs for at-risk youth.

Many recent studies have analyzed the problems of young people in LAC and made policy recommendations. This book contributes to the debate in six ways that are intended to deepen our conceptual thinking about youth, to present new tools that will allow for a more accurate analysis of the youth population, and to extend the boundaries of policy options and reforms. The book does the following:

1. Focuses on young people who can be considered to be at risk. This subgroup is defined as young people who have factors in their lives that lead them to engage in behaviors or experience events that are harmful to themselves and their societies, and that affect not just the risk taker, but society in general and future generations. These behaviors include leaving school early without learning, being jobless (neither in school nor working), engaging in substance abuse, behaving violently, initiating sex at a young age, and engaging in unsafe sexual practices.

2. Considers the young person in his or her entirety rather than analyzing and proposing policies specifically for, say, the young unemployed, young mothers, or juvenile delinquents. This required the use of data sets that contained information about the many facets of a young person's life and the use of analytical tools that allowed us to view many different dimensions of a young person's life simultaneously.

3. Considers the many actors who shape the young person's environment during his or her youth. This allowed us to make policy recommendations for a wider range of actors than studies that focus only on the young person.

4. Highlights the common factors that underlie most kinds of risky behavior and argues that a small set of broad, well-chosen policies can have a bigger impact than a sector-based portfolio.

5. Develops a new methodology to estimate the cost of risky behavior—to the individual and to society—across Latin America that will yield

more accurate information for decision making at the individual and government levels.

6. Narrows the thousands of youth programs in the world to 7 "must have" initiatives, 9 "should have" initiatives, and 7 "general" programs and policies that are the most relevant for at-risk youth in LAC. These 23 programs and policies are the result of intensive consultation with policy makers, practitioners, and academics to identify the most appropriate policies and programs to support at-risk youth in LAC.

Why Do Young People Deserve Special Attention?

Why should 12- to 24-year-olds be the subject of their own study? The book presents three reasons why youth development is not an extension of child development and why young people cannot be treated the same as adults in policy-making terms.

First, risky behavior frequently begins in the youth years. Although adults engage in violent activities and very young children leave school, the first time that most people engage in these kinds of behavior is between the ages of 12 and 24. For example, sexual initiation peaks at age 15 in Haiti, as does dropping out of school in Mexico. The largest number of Chileans start smoking at age 18, which is also the age at which the largest number of Mexicans go to work for the first time. The first incident of violent behavior peaks at a later age than does smoking or labor force entry in Jamaica, with an increase until the early 20s, and then it decreases at older ages.

Second, the circumstances and actions that lead to overall inequality in LAC first emerge during the youth period. While school enrollment among children (before the age of 12) is nearly universal in LAC, secondary school enrollment is far from universal, particularly among the poor. Very few children under age 12 are parents, but many poor 17-year-old girls are mothers. Criminality disproportionately affects the younger segments of society. The factors responsible for these gaps may emerge in childhood, but the negative results materialize during the youth years.

Third, policies directed toward young people should be different from those for adults or children because young people respond to incentives differently. Peer pressure, the formation of identity, and the need to establish independence are more crucial considerations to young people making decisions than they are to adults or children. Young people are more prone to impulsive behavior and thrill seeking than adults. Science supports the

stereotype of the moody youth: the part of the brain that regulates impulses is the last to develop and thus works less efficiently than other parts of the brain during youth. Further, adults tend to make better decisions than young people because they consider more options, risks, and long-term consequences than young people do. This may be a matter of experience—young people have not had the time to collect enough experiences that are useful in decision making. Alternatively, it may be because the area of the brain that regulates decision making is still developing during adolescence. The ability to think ahead increases with age, and with it, the ability to make better decisions improves as well.

Key Messages

Message 1: Many young people in LAC are at risk, and investing in them will have a positive impact on social and economic development in the region, both today and well into the future

More than half of all young people in LAC can be considered to be at risk. The youth population (defined as those between the ages of 12 and 24) is often seen as a homogenous group, but a closer look reveals four distinct groups of young people:

- *Those at risk and beyond*. As many as 25 to 32 percent of the 12- to 24-year-old population are suffering the consequences of at least one kind of risky behavior. These young people have dropped out of school, are young parents, are not employed, are addicted to drugs, or have been arrested.
- *Those engaging in negative behavior and at risk of suffering consequences*. Eight to 28 percent of the youth population are often absent from school, are involved in risky sexual activity, and are experimenting with alcohol or drugs. They have not left school, do not have children, and have not been arrested, but their behavior predisposes them to these outcomes. Although their behavior may not have affected their well-being yet, it may have affected the well-being of society by, for example, increased crime and violence.
- *Those at risk of engaging in negative behavior*. Another 10 to 20 percent of 12- to 24-year-olds are in circumstances that predispose them to engage in negative behavior, including suffering domestic abuse in the home; having low self-esteem; and not feeling connected to schools, their neighborhood, or caring adults.

- *Those not at risk.* Around 20 to 55 percent of the LAC youth population is in school, beginning their work and family lives after completing their education, initiating sexual activity at a later age, using safe sexual practices, and staying away from substance abuse and violence.

Youth at risk tend to come from poor families, a finding that suggests that programs preventing risky youth behavior should be targeted to the poor. Some kinds of risky behavior, such as early school dropout and premature employment, are a result of poverty, but no causal relationship has been statistically identified between poverty and violence, poverty and early and risky sexual activity, or poverty and substance abuse. Nonetheless, the fact that poverty and these kinds of risky behavior are correlated allows us to use poverty status as a means to target programs to those who are most at risk of engaging in negative behavior during their youth. Young people living in rural areas and ethnic minorities also have a higher prevalence of risky behavior.

Risky youth behavior reduces economic growth in LAC by up to 2 percent annually. If today's 15- to 24-year-old school dropouts had completed secondary school, they would earn more over their working lives than if they had not left school prematurely. This "lost" income, or foregone output, over their lifetime is equivalent to 6 to 58 percent of gross domestic product (GDP) measured in today's terms, depending on the country analyzed and the rate of return to schooling assumed. For example, if Guatemalan dropouts who are ages 15 to 19 today had completed secondary school, their additional earnings over their lifetimes would be equal to more than half of the country's GDP for this year. These foregone earnings mean less income and a lower standard of living for the young person and his or her family over their lifetimes. Youth unemployment, violence, unplanned pregnancies, sexually transmitted infections (STIs), and substance abuse can each reduce a country's output by up to 1.4 percent of GDP annually.

Risky youth behavior costs national treasuries in LAC billions of dollars. The out-of-pocket costs of risky youth behavior can be up to 1 percent of annual GDP. Some kinds of risky youth behavior, such as early school leaving, save the government money, and others, such as youth unemployment, are cost neutral (assuming there is no unemployment insurance). But other behaviors impose real costs. For example, in the case of violence, substance addiction, STIs, or teen pregnancy, the government spends resources to assist (or to punish) these young people and to protect the rest of society from their behavior, particularly from violence.

Risky behavior by young people costs them and their families large sums of money, in either foregone output or out-of-pocket expenses. For example, school dropouts in LAC who are ages 15 to 19 today will have lower earnings over their lifetimes equivalent to 486 percent of today's per capita GDP. In other words, each school dropout forfeits the equivalent of 14 percent of per capita GDP each year of his or her working life. This loss of lifetime earnings ranges between 345 percent in Argentina to 688 percent in Guatemala. The foregone lifetime earnings due to unplanned pregnancy in Mexico in 2006 reached as high as 339 percent of per capita GDP, while substance use in Mexico was responsible for more than 500 percent of per capita GDP in foregone lifetime earnings.

Governments underinvest in young people because they tend to underestimate the true costs of negative behavior. And, even though the costs of engaging in risky behavior are very high, young people continue to take these risks. Their poor decisions are partly the result of information failures that can be corrected. First, most of the cost is lost output—what would have been possible if the young person had completed secondary school or not become addicted to alcohol—which is often not perceived as a "cost" in the way that an out-of-pocket expense is. Second, many of the costs become due in the future rather than when the decision is made. Because both young people and policy makers tend to focus on the immediate consequences of young people's decisions, rather than on the longer-term costs, poor decisions are made in the short run. Finally, young people tend to underestimate the probability that a negative outcome will happen to them. For example, while many youth know that unprotected sex may lead to HIV infection, they assume that it will not happen to *them* when they decide not use a condom.

Demographic trends in LAC suggest that the total costs of risky behavior by young people will increase in the future. The total number of young people in LAC will increase until around 2025, although their share of the population will continue to decline over time. However, because at-risk girls have higher birth rates than the general population, and given the likelihood that they will pass on this costly behavior to successive generations, the growth in the at-risk youth population and the costs incurred by them will decline more slowly than the general youth growth rate.

Message 2: Understanding the nature and prevalence of risky youth behaviors helps us to recommend the best policies for at-risk youth

Young people in LAC are engaging in a range of risky behaviors. Secondary school dropout rates range from 25 to 63 percent in the sample of countries

considered, compared with 15 percent in the United States. Youth jobless rates—defined as young people who are either not working or are unemployed—are as high as 33 percent in Colombia. Low contraception use—as low as only one in five sexually active Nicaraguan men and women—is responsible for the fact that 12 to 27 percent of adolescent girls in several LAC countries are already mothers. Youth homicides are higher in LAC than in any other region of the world, with up to 213 young men murdered in Colombia for every 100,000 young men in the population. Substance use is as high as 38 percent (tobacco use in Chile), though the United States has higher rates than most LAC countries.

Evidence from Argentina, Brazil, the Caribbean, Chile, Honduras, and Mexico shows that young people who engage in one risky behavior often engage in several other kinds of risky behavior as well. This is due to two factors. First, a common set of underlying factors lead young people to engage in many types of behavior. For example, an unsupportive home life is correlated with early school leaving in many countries, and it is also correlated with engagement in risky sexual behavior. Second, some kinds of behavior can cause other kinds of behavior. For example, many schools do not make any special provisions for adolescent mothers, which means that they have to drop out of school to take care of their infants.

This co-occurrence of behaviors has several policy implications. Programs that target several different kinds of behaviors are more efficient than those that target only one. Also, because some of these behaviors are unobservable to analysts and policy makers (such as risky sex), we can target programs that modify these unobservable behaviors toward young people who are engaging in an easily observable kind of behavior, such as dropping out of school.

The book focuses on five types of youth risky behaviors and their associated negative outcomes: leaving school without learning, being jobless, engaging in early and risky sexual behavior, engaging in crime and violence, and abusing substances.

Leaving school without learning puts LAC youth at a global disadvantage—Today's LAC youth are the most educated cohort in the region's history, but they are lagging behind the rest of the world. More than 20 million secondary school–age people in LAC are not enrolled in school or are lagging behind the school year they should be in, which is equivalent to one in every three secondary school–age young person. The range for the region for nonenrolled young people is a low of 4.5 percent in St. Kitts and Nevis and a high of 71.8 percent in Guatemala. The poor

are lagging even further behind, with only 33 percent of young people from the poorest 40 percent of the LAC population having completed 9th grade, compared with 67 percent of young people from the wealthiest 20 percent of the population. Although the number of years of completed education has doubled in LAC between 1960 and today, the increase has been even greater in other regions that had levels of educational attainment comparable to LAC in 1960. These more educated countries are now LAC's global competitors.

Perhaps even more worrisome than the lagging educational attainment is the fact that young people are not learning. Results from the Programme for International Student Assessment (PISA) education-quality tests show that LAC students consistently perform below the level expected of them given their countries' levels of GDP per capita. And those from the poorest LAC households are the worst performers in the global sample.

Joblessness, not unemployment, is the main concern—Many young people find jobs soon after leaving school, but the likelihood of a successful school-to-work transition depends on family needs and on macroeconomic conditions. In labor markets with low unemployment rates, such as Mexico, only 5 percent of school leavers have not found a job within a year, while in the more difficult labor markets, like Argentina, 16 percent cannot find work within two years of leaving school. Those from poorer families move from school directly to work more frequently than young people from nonpoor families, partly because they are forced to leave school prematurely to take advantage of any job opportunity that arises.

Youth unemployment trends are similar to those of adult unemployment. Although youth unemployment rates are on average double those of adults, young people's unemployment duration is about equal to that of adults, lasting about three months in Mexico (with its low unemployment rate) and nine months in Argentina (where the unemployment rate is high). This suggests that young people do not have trouble getting a job, but that they become unemployed more frequently than adults. There are two reasons for this. First, young people move around more than adults: about 13 percent of young people leave school or a job in any period, compared with only 10 percent of adults. Second, when they move, young people are 2 to 3 percentage points more likely than adults to move from work to unemployment rather than from one job directly into another job. This corresponds to the same patterns observed among young people in the United States and other countries in the Organisation for Economic Co-operation and Development (OECD) who spend the

first two years out of school gaining experience and "shopping" for a job that might lead to a career.

Joblessness, a term that includes both the unemployed and the inactive, is the most analytically useful way to characterize the problem faced by LAC youth. One in four young people in LAC are jobless, and many of these young people would not be reflected in unemployment statistics because they are not actively looking for work. In contrast with unemployment rates, jobless rates tend to be relatively similar across LAC. The jobless rate is significantly higher for the 20 to 24 age group than for the 14 to 19 age group because a large share of young people between 14 and 19 years of age are still enrolled in school, whereas a large share of young people between 20 and 24 have already left school. And the jobless rate is higher for women than men, given the persistent social norm that women, rather than men, dedicate themselves full-time to household work.

Sex is getting riskier and, among certain populations, sexual initiation is beginning earlier—Sexual activity has become riskier than in previous generations. Because people in LAC marry later than they used to, half of women and almost all men reported having had sex with a nonmarital, noncohabiting partner, and few reported using a condom. Adolescents ages 15 to 19 are less likely to use a condom than the 20 to 24 age group, and women are two times less likely than men to report that a condom was used during their last sexual experience.

Many consequences of risky sex are graver today than in the past. Even though teen birth rates have declined over time because there is more information and access to contraception, there are more teen mothers today than at any time in history because of the increasing size of the teenage population. Also, pregnancy rates are three to five times higher among poor adolescents than among nonpoor adolescents. Women are giving birth at younger ages than in the past. This trend is driven by a decrease in the median age of women giving birth to their first child among uneducated women in rural areas. Furthermore, sexually transmitted infections, including HIV, are an increasing problem for young people, particularly in Central America and the Caribbean, which have the second highest HIV prevalence rate among young people ages 15 to 24 after Sub-Saharan Africa.

In contrast to global trends, data from some countries in LAC show sexual activity beginning earlier than in previous generations. Up to 16 percent of women ages 25 to 29 report that they had initiated their sexual lives by the age of 15. This is an increase of 8 to 50 percent

over the past 20 years in the four countries for which such evidence exists: Colombia, the Dominican Republic, Haiti, and Nicaragua. The situation is even worse in the English-speaking Caribbean, where 82 percent of young men and 52 percent of young women between the ages of 10 and 18 who were sexually active stated that they had initiated sexual activity by age 13. Many of these young people reported that their first sexual experience was forced.

New forms of crime and violence are emerging in LAC—The LAC region has the highest homicide rate of men between the ages of 15 and 29 (69 per 100,000) in the world. With 19.3 homicides per 100,000 people in the 1990s, rates for the LAC region are almost double the world average of 8.8. Even starker homicide rates can be seen among the youth population in LAC. The homicide rates for young men range from 7 per 100,000 young men in Chile (compared with 5.4 per 100,000 males of all ages) to 212 per 100,000 young men in Colombia (compared with 116 per 100,000 men of all ages). Young women's homicide rates are one-tenth those of men, but they still have higher homicide rates than do all females. Violent crimes tend to be geographically concentrated in poor urban communities.

Perpetrators of violent crimes are mostly young men between the ages of 16 and 25. For example, among those arrested in 2004 in Jamaica, more than half were men ages 16 to 30, and men in the narrower age group of 16–25 committed the bulk of major crimes. However, arrest records give only a partial picture of youth violence. Evidence from the United States indicates that, for every youth arrested in any given year, at least 10 more were engaged in some form of violent behavior that could have seriously injured or killed another person.

Two new types of violence are surging in LAC: gang and drug-related violence, and school-based violence. Gang and drug-related violence is on the increase, with young people as the most visible culprits. There are approximately 25,000 to 125,000 active gang members in El Salvador, Guatemala, and Honduras. Younger gang members are responsible for a disproportionately large share of offenses, committing more serious and violent crimes while they are gang members than after they leave the gang (if they are lucky enough to make it out alive). The phenomenon of school violence—all incidents in which any member of the school community is subject to abuse; to threatening, intimidating, or humiliating behavior; or to physical assault from students, teachers, or other staff—is widespread in LAC. Violence among students is the most common type,

followed by student violence directed at teachers and violence on the part of parents toward teachers.

Binge substance use is on the rise—While Latin American adolescents consume less alcohol than adolescents in Western Europe, binge use is on the rise. Drinking to get drunk is the pattern favored by a growing minority of young people. Increased binge drinking and intoxication in young people—the pattern of consumption associated with Northern Europe—is now increasingly seen in countries such as Brazil and Paraguay.

About 25 percent of young people in Latin America ages 13 to 15 use tobacco, which is similar to teen smoking rates in United States. The countries with the highest prevalence of adolescents smoking in LAC are Argentina, Bolivia, Chile, and Uruguay. Young people mistakenly assume that they have control over their smoking habits: More than half of high school seniors (56 percent) in the United States who smoke cigarettes say that they will no longer be smoking in five years but less than a third of this population (31 percent) actually quit smoking by that time. Furthermore, a number of studies in the United States and Colombia have noted a pattern of progression from nonuse to using tobacco, to using marijuana, and to using other illicit drugs.

What little evidence there is in LAC shows that young people are not particularly heavy drug users. However, the trends are going in the wrong direction, with increased binge use and earlier use of marijuana, inhalants, cocaine, and other illicit drugs.

Message 3: A core set of factors lies behind risky behavior by young people

Feeling disconnected from school has emerged from the research as an explanatory factor for all kinds of risky behavior, and some argue that it is the most important factor affecting all kinds of behavior. School connectedness—feeling that someone in a young person's school cares about his or her well-being—is negatively correlated with school repetition, school leaving, premature employment, risky sexual activity, early sexual initiation, violence, and substance use. "Connectedness" is not the same as attending school; the correlation emerges even after controlling for school attendance. Nor does it have to do with school quality, because young people in poor and nonpoor schools can feel school connectedness. However, presumably schools with dangerous environments and overworked teachers will be less likely to connect with students than safe schools with a caring staff.

The feeling of having a parent who cares is a protective factor for all five of the risky behaviors that are discussed in this report. Young people who feel a connection with a parent are more likely to stay in school, to not enter the labor force prematurely (or if they do, they remain in school), to initiate sex at a later age and use condoms, to avoid the use of drugs and alcohol, and to be less violent than those who do not have this emotional connection to their parents. Young people who live with their parents engage in fewer kinds of risky behavior than those who live with one or no parents. However, even after controlling for household structure, young people who participate in activities with their parents, who feel that they can talk to their parents, or who feel a sense of closeness to their parents are less likely to engage in risky behavior than those who do not have these connections. This is true in all five of the LAC countries for which data could be obtained. Also, psychological, physical, or sexual abuse in the household is correlated with risky behavior by young people. When young people have no sense of connection with their parents, a feeling of connection with other adults can partly compensate.

Household poverty is a strong and consistent correlate of risky behavior in all of the countries studied. Only alcohol use was not correlated with household poverty in all countries, but this may be a result of the widespread social acceptance of drinking that cuts across income groups. In some cases, household poverty directly affects youth behavior; for example, early school leaving and premature labor force entry increase when a parent loses a job, but school attendance increases when households are given cash in exchange for secondary school attendance. In other cases, such as the link between poverty and crime and violence or substance abuse, the causal relationship is less clear, but a strong correlation has been observed. Notably, macroeconomic fluctuations alone are not sufficient to cause a change in young people's behavior. Instead, it is when the macroeconomic slowdowns trickle down to the level of the household that poverty starts to affect behavior.

Men and women engage to different extents in different kinds of risky behavior. Males are more likely to drop out of school, to enter the workforce prematurely, to engage in violent behavior, and to engage in substance abuse. The early school leaving and premature employment may be connected, as young males are much more likely to engage in paid labor than females. Male propensity for violence and drug abuse may be part of their search for identity, given that a machismo culture glorifies risky behavior. Girls also engage in certain kinds of behavior in their search for gender identity. Early and risky sexual activity and early

marriage may be perceived as ways to connect and to have a role in society. Young girls from poor neighborhoods across the region have stated that their reason for having a child at a young age is to be considered a woman and occupy the role of mother in society.

Some laws have a disproportionate effect on young people's risky behavior. Labor legislation limits youth employment and contributes to joblessness, and legal maternity leave provisions may limit young women's participation in the labor force. An absence of legislation protecting the rights of adolescent mothers forces them to drop out of school to care for themselves while pregnant and for their children after giving birth. On the other hand, some laws have a positive effect on risky behavior. For example, laws that limit the location and hours of tobacco and alcohol sales reduce use of these substances by young people more than that of adults.

Mental health, manifested through feelings of inclusion, is correlated with all five kinds of behavior considered in the study. Young people who feel a part of their community, who have friends, and who do not feel alone have a lower probability of engaging in risky behavior. This is related to the parental and school connectedness discussed above, but it also reaches a wider group. Clearly, the wrong kind of inclusion, such as in gangs, increases negative behavior, but in other circumstances social inclusion is a protective factor.

Although each of these factors can, on its own, increase risk or protect against it, they are, in fact, cumulative in nature. As the number of protective (good) factors in a young person's life increases—for example, caring parents, connection to school, and a secure gender identity—his or her risky behavior decreases. Conversely, as the number of risk factors increases—such as social exclusion and abusive home environments—the propensity for young people to engage in negative behavior also increases. Therefore, the challenge and the opportunity is to build up as many protective factors in a young person's life as possible while minimizing the risk factors.

Designing Effective Interventions

An effective portfolio of interventions for youth at risk can be developed without significant additional cost. This requires effective targeting of interventions by scaling up programs that affect several kinds of risky behavior and scaling down those that have had little or no impact.

The policy section of the book presents a set of recommendations based on the international evidence of what does and does not work in

terms of helping youth at risk. It draws on the conclusions of a working group of practitioners, policy makers, and academics from Latin America and elsewhere who specialize in youth at risk. This group identified a short list of what they believe are the most effective policies and programs for preventing and mitigating risky behavior among young people in the most cost-effective manner in the context of LAC.

Principles of Good Policy for Youth Provide a Structure to the Portfolio

Five principles can provide a structure for a high-quality, efficient youth portfolio:

- *Treat the youth portfolio as an investment and design it accordingly.* Negative outcomes from risky behavior by young people have significant costs to both the individual and society, and the incidence of risky behavior among youth is increasing in some cases. Preventing these kinds of behavior would help young people to enjoy better health status, greater earnings potential, and a greater chance of enjoying life. It would also reduce social costs, thus freeing up public resources for other initiatives and increasing growth, as young people would have greater human capital and thus greater productive capacity. This suggests that public monies spent on youth development are a necessary aspect of a country's investment in economic and social development. The ideal pattern would be to make heavy investments in people early on, which should lead to less need to invest in people later in their lives.
- *Include programs for preventing risky behavior that begin at birth*. A youth portfolio that includes policies and programs only for those ages 12 to 24 is starting too late. Preferences and behavior are formed from a very early age, so programs to prevent risky behavior need to start at a very early age. The focus should not only be on children, but also on their families, schools, and the other environments that shape their young minds.
- *Include programs for at-risk youth who need second chances*. Even if high-quality early investments are made in children, some young people will still engage in risky behavior. Regardless of the reasons for this (individual misjudgment, family decisions and behavior, market failures, or a failure by policy makers to deliver basic services), young people need and deserve a second chance to build their futures. Thus,

a clear set of second-chance programs should be included in any at-risk youth portfolio. These programs focus on helping those affected by their own risky behavior to recover and return to a safe and productive path to adulthood, and the programs should stress human development rather than punishing risky behaviors.

- *Target those most at risk.* Although we would like to provide prevention programs to all children and young people, budget constraints make that impossible. Therefore, the best strategy with the highest returns may be to target interventions to those who are most at risk. Good targeting mechanisms rely on indicators that are easily observed and measured. This is a particular challenge for prevention programs (for example, how does one identify those who are most at risk?) and for programs that aim to affect those behaviors that are not easily observable (risky sexual activity, for example). The best targeting indicator for prevention programs is poverty, followed by rural residence. The best target group for second-chance programs is school dropouts, followed by targeting by age because age-appropriate programs have a greater impact than general programs do.
- *Prioritize policies and programs that affect multiple risks.* It is not fiscally possible to have a separate set of programs for each kind of risky behavior. The good news is that many programs that are designed to affect one behavior actually influence multiple risky behaviors. For example, conditional cash transfer programs intended to encourage young people to stay in school can also lower substance use and violence because of the greater attachment to schools. In addition, many ongoing programs can be modified at marginal expense to better address multiple risks. For example, education equivalency or job training programs can be strengthened by providing life skills to help a young person not just find employment, but become more employable over a lifetime. Early child development programs can have a stronger impact on preventing risky behaviors by incorporating effective parenting skills. By focusing on select programs that have multiple impacts, the cost effectiveness of the whole portfolio can be improved.

Twenty-Three Elements of a Policy Portfolio for At-Risk Youth

There is general agreement on the following seven "core" programs and policies that should be a definite and immediate part of every investment portfolio for youth because there is very strong evidence that they

have been successful in cost-effectively preventing multiple kinds of risky behavior:

- *Integrated early childhood development (ECD) for children from poor households*. ECD programs have been shown to reduce all five kinds of risky behavior discussed in this report. Targeting high-quality health, nutrition, cognitive development, and parenting services to the poorest families and children is necessary to achieve the greatest impact.
- *Secondary school completion*. Finishing secondary school is perhaps the most important strategy for reducing all five kinds of risky behavior. Not only does staying in school provide young people with more knowledge and skills (in which there is room for improvement in most LAC countries), it also enhances young people's feelings of safety and belonging, which can prevent other kinds of risky behavior.
- *School-based prevention and remediation programs*. Sex education classes in schools have been proven to be effective because the young people are a captive audience for the information. These programs are especially effective when they are designed to take into account the age and sexual experience of their targeted audiences. However, similar programs aimed at preventing violence have not been successful. Programs to train teachers or other school staff in identifying students' health and education deficiencies early, and to guide the young person toward services or special programs to help them overcome these limitations, have been shown to reduce school leaving, risky sexual activity, violence, and substance use.
- *Youth-friendly health and pharmaceutical services*. Many young people know how to avoid pregnancy and STIs, but access to necessary services may be difficult for them. Funding for outreach programs, mobile clinics, and health centers that are sympathetic to the needs of young people can help overcome geographical or psychological barriers to accessing health centers.
- *Use of the media for prevention messages (combined with improved services)*. In some countries, the media have been successfully used to reduce risky sexual behavior, violence, and substance abuse. The prevention messages are most effective if they adopt a young person's point of view and offer messages that are culturally and socially acceptable.
- *Improved caregiving*. Mentoring programs that teach parenting skills—positive discipline, parent-child communication, nonviolent coping skills, and nutrition—to parents and guardians of children and young people, especially when combined with financial incentives, encourage

adults to make good choices for their children. These programs reduce all five kinds of risky behavior.
- *Monitoring indicators to track progress.* Using indicators to track progress in reducing risky behavior is the basis for identifying effective policies and programs. It allows policy makers and program coordinators to determine whether the interventions are working and then to make rapid adjustments to the portfolio to improve its impact.

The portfolio should also include second-chance programs, accompanied by frequent and thorough monitoring and impact evaluations. While the few program evaluations that exist in LAC are primarily for prevention programs, the policy experts identified a number of promising programs for which there is some evidence of a positive impact. However, further evaluation is needed before they can be given a permanent place in the portfolio:

- *Education equivalency and lifelong learning.* Given the high incidence of secondary school dropouts, remedial education programs offered on a flexible time schedule and appropriate for the needs of students have yielded positive results in a small number of countries. Receiving an equivalency degree of this kind is particularly important to enable young people to enter the labor force. There is some evidence that this kind of intervention affects all five types of risky behavior in a positive way.
- *A new model for youth job training.* The LAC region has created a set of alternative training programs for at-risk youth, commonly referred to as *Jóvenes* programs. These programs are implemented by nongovernmental organizations (NGOs) and the private sector, and they are regulated by the government. The *Jóvenes* programs focus on developing the person as a future worker, rather than limiting the training to technical skills. This method has been shown to increase youth employment by more than traditional technical and vocational training.
- *Cash transfers for reducing risky behavior.* The opportunity costs to households of keeping children in school increase as the children get older; offsetting these costs by providing households with cash transfers that are contingent on school attendance have proven effective in several LAC countries. However, there is less evidence on whether this is an effective means to provide incentives for secondary school completion or for altering other risky behaviors, such as sexual activity or substance use. Cash transfers are expected to positively affect all five kinds of risky behavior.

- *Supervised after-school programs.* Structured activities in existing public spaces—schools, churches, parks, community centers—have reduced a host of risky behaviors in the United States. The evidence from LAC is more scarce, but hopeful.
- *Youth service programs.* Voluntary service programs can give young people work experience and teach them how to be better workers and citizens. The impact of these programs in the United States has been positive, and the anecdotal evidence from LAC is hopeful but has yet to be evaluated.
- *Mentoring.* High-quality mentoring programs have been shown to create a feeling of connection between a young person and an adult, which has a positive impact on all kinds of risky behavior. Evaluations of the effects of these programs in the United States have been strongly positive.
- *Youth employment services.* Young people usually have difficulties finding employment, so labor intermediation services to help them with their job searches may be a solution. However, there is no evidence on whether these kinds of programs are effective.
- *Life-skills training.* Learning to be an adult can be difficult, but life-skills training embedded in other youth-oriented programs can teach young people self-concept skills, cognitive skills, and social skills that will help them to make better decisions. No rigorous evaluations have been carried out to assess whether these programs are effective.
- *Specific support to young entrepreneurs*. Although self-employment is the occupational category that employs the lowest share of young people, it may be a necessity in areas with no labor demand. We were able to find only one small program in Peru that supported young entrepreneurs that had been evaluated as having had a positive impact. More research needs to be done to determine what aspects of these programs are most effective in helping youth at risk to become successfully self-employed.

Finally, the portfolio of specific interventions should be complemented with general policies that have a disproportionately positive impact on young people. Youth development is not confined to programs or policies targeted to young people or their parents, teachers, and immediate friends. More general policies also contribute to the youth portfolio. For example, raising taxes on cigarettes has been shown to have a disproportionate effect on reducing tobacco consumption by older teenagers. On the other hand, minimum wage laws disproportionately affect youth in LAC *negatively*,

because they are the ones most likely to lose their jobs when the minimum wage increases. Other general policy interventions that have been shown to have a particularly positive effect on young people's behavior are investing in infrastructure in poor communities, reducing the availability of firearms, licensing alcohol distributors, disseminating messages of nonviolence, improving the justice system, and providing birth registration to the undocumented.

A More Effective Youth Portfolio Can Be Built in a Budget-Constrained Environment

The first principle for building a youth portfolio under tight budget constraints is to reallocate resources away from programs that do not work. There are several programs, variations of which exist in many countries in the LAC region, that governments should consider reducing or eliminating from their at-risk youth portfolio. This may not be an easy decision because many of these programs have popular support, particularly because they show that government is "getting tough" on risks that affect all of society, such as crime and violence. However, recent work in many countries has shown that the following programs are either ineffective or actually encourage risky behavior by young people:

- *Get-tough strategies*, including increased youth incarceration, trying young people in adult courts, and placing them in adult criminal institutions, which have been shown to increase delinquency
- *Gun buybacks*, which have not been shown to reduce violence, and in fact can increase the availability of guns by providing a market for their purchase
- *Zero tolerance or shock programs* used in both violence and drug prevention, which have been repeatedly shown to be ineffective
- *Boot camps*, which provide no significant effects on recidivism and, in some cases, actually increase delinquent and criminal behavior
- *Nonpromotion to succeeding grades and early tracking* in school, which have not shown demonstrable benefits
- *Traditional publicly funded vocational education courses*, which tend to be both expensive and ineffective
- *Constructing youth centers*, which is a costly approach to holistic youth development that has shown little to no effects in reducing risky behavior among young people
- *Abstinence-only programs* to delay the transmission of STIs and HIV and to prevent pregnancy, which have no track record of success

The second principle for building a youth portfolio under tight budget constraints is to reallocate resources toward programs that have been shown to have a positive impact and that are cost effective. In this book, we have highlighted 23 core programs, promising approaches, and general policies that are all good candidates to be included in a youth portfolio. Thus, the question becomes, how do policy makers select among those programs? We propose three strategies to inform this selection:

- *Evaluate the impact of programs to identify which have the greatest positive effect on the kinds of behavior that is of interest to policy makers*. Because of the absence of country-specific evidence about the impact of many of these programs, billions of dollars are spent worldwide on programs that may have very little effect on preventing risky behavior or mitigating its effects. Thus, evaluation should be a key component of any youth investment strategy to help policy makers sort out what works, what is ineffective, and what will actually make the problem worse. The best impact evaluations collect data by measuring the appropriate indicators both before and after the program for two comparable groups of young people: a group that went through the program (treatment group) and a group that was not included in the program (control group). For both groups to be comparable, the differences in their observable characteristics must not be statistically significant prior to the beginning of the program. The collection and analysis of data take time, so early planning and budgeting for an evaluation is necessary. Programs should be evaluated both for their impact on the primary objective and for their effectiveness in reducing other kinds of risky behavior, in case it turns out to be effective in preventing or mitigating multiple kinds of behavior.
- *Use cost-effectiveness criteria to select the program that has the biggest "bang for the buck."* Different programs may affect the same kinds of behavior, but the cost per unit of "output" (in other words, per behavior changed and the magnitude of the change) will differ between programs. Thus, program cost information should be collected and analyzed along with the program impact evaluation to determine which program produces the desired results at the lowest cost.
- *Identify outcome-based goals for the portfolio and monitor these outcomes*. The youth portfolio should be accompanied by a set of indicators to monitor the progress made by the interventions toward reaching their goals. The most appropriate indicators will measure *outcomes*—such as secondary school completion rates, percentage of

young people who are jobless, sexual initiation ages, and youth arrests—for 12- to 24-year-olds and should be constantly monitored to track progress. The progress indicators should be accompanied by program output indicators, such as the number of young people participating in the various programs.

The third principle for building a youth portfolio under tight budget constraints is to maximize the inputs of each actor by assigning roles based on their comparative advantages. Families, communities, NGOs, local institutions, the private sector, and young people themselves all have crucial roles to play in improving the outlook for young people in LAC, and, without their participation, any government strategy will be less successful. These actors are all already involved in this process, but their impact is likely to be greater if they each play the role that fits most closely with their comparative advantage. For example, young people are in the best position to identify what kinds of programs would resonate with the youth crowd; thus, giving them a role in the development of youth-oriented programs makes sense. Furthermore, youth are active in their communities, thus making them a part of the group that implements and monitors programs at the local and national levels, while the national government has a comparative advantage in defining and funding general strategies, monitoring outcomes, and coordinating among all of the various actors involved.

Policy Conclusions

Although the challenges facing young people today are great and those who are at risk are at a particular disadvantage, there are some effective solutions. Governments should view their portfolios as an investment in young people and should include both prevention and second-chance programs and policies that affect multiple kinds of behavior and target young people who are most at risk. The gold standard programs for prevention are well known and ought to form the basis of any portfolio. The best second-chance programs are less well known, but we have a good idea about which are worth investing in and which general policies are needed to complement the larger portfolio. These portfolios can be funded by reallocating resources away from current programs that do not have an impact and by selecting the most cost-effective programs that are known to have had an impact. Also, program effectiveness can be increased by reassigning roles of families, communities, NGOs, local institutions,

the private sector, and young people themselves based on their comparative advantages.

The transition process will not be easy because there will be winners and losers. This points to the need for consultations, consensus building, discipline, phasing, and careful planning to design and implement a youth portfolio around the most effective interventions appropriate for each country. Proper management of this process will depend on the needs, political environment, and goals of each country. This book offers tools that may help policy makers to formulate the process, but the work to actually realize the promise of youth has to be done at the country level. It will require hard work and commitment, but the rewards that can be reaped by the young people of LAC and by society at large are enormous.

CHAPTER 1

Introduction

The Latin America and Caribbean (LAC) region stands out in the developing world for its focus on youth.[1] There is a renewed awareness among policy makers and within the general population that young people have the potential to be agents of change—for themselves, for their communities, for their countries, and for the world. The focus on youth has led to the greater inclusion of young people in decision making at the household and national levels (World Bank 2006a), but it has also exposed the serious constraints that limit their potential. The international community has joined the governments of LAC in sponsoring dialogues with young people, giving technical and financial support to projects aimed at improving the situation of young people, and they have undertaken analytical work to build a better information base on these issues.

Young people are an important asset to all societies, but in LAC, they also contribute to some costly problems that plague the region. Illegal drugs permeate LAC, teenage pregnancy remains a persistent problem, and crime and violence are reaching unprecedented levels in some countries, shutting down entire neighborhoods and terrorizing citizens. For example, Table 1.1 compares data on risky youth behaviors for seven countries in LAC. The data show that a substantial percentage of school-age youth are not enrolled in secondary school (from a low of

Table 1.1. Comparing Risky Youth Behaviors in Different LAC Countries

	% of secondary school-age youth not enrolled in secondary school	Jobless rate	Reported contraception use		Teen pregnancy	Homicide (per 100,000 youth)	Heavy drinking (male)	Tobacco use
			Male	Female				
Bolivia	33		58	50	16	69	—	69
Brazil	28	25	73	66	18	81	26	—
Chile	25	28	—	—	—	7	7	38
Colombia	46	33	—	45	21	213	15	—
Dominican Republic	59	—	69	50	23	35	18	—
Nicaragua	63	—	22	22	27	—	—	—
Peru	33	21	73	70	12	—	—	20
United States	15	8	80	80	25	24	11	23

Sources: Cunningham and García-Verdú, forthcoming; World Bank 2004.
Note: The statistics in this table may differ from those presented in other sources due to a difference in definitions, source data, and samples used by various entities that generate these statistics. Thus, the statistics in this table should be interpreted as general magnitudes and not as specific values. Please see the table sources for a

25 percent in Chile to a high of 63 percent in Nicaragua). The data also illustrate the extent to which youth in these seven countries experience joblessness, unsafe sex, teen pregnancy, homicide (per 100,000 youth), and substance use and abuse. It is not accurate to blame all these ills on youth, but young people are disproportionately engaged in these activities, which impose enormous financial and psychological costs on society and contribute to overall poverty and inequality.

The objective of this book is to gain a deeper understanding of at-risk youth and to use this to develop more effective youth development policies in LAC. The book argues that, while some young people may be agents of some societal ills, it is possible to prevent them from engaging in risky behaviors or transform those already engaged in such behaviors into productive citizens. By gaining a better understanding of the processes through which a child becomes a troubled youth, we can better shape policies to prevent and mitigate risky behavior.

This book contributes to the recent literature on youth in LAC in six fundamental ways:

- This book focuses on at-risk youth rather than the entire youth population. Young people are considered at-risk when they have factors in their lives that tend to lead to actions that harm themselves or others.

These actions may include leaving school without sufficient education, being idle (in other words, being neither in school nor at work), abusing drugs and alcohol, behaving violently, and becoming sexually active at an early age and/or engaging in unsafe sexual practices. Such behaviors affect not just the risk taker, but also society in general, including future generations.

- At-risk youth are considered holistically, rather than analyzing and proposing policies for specific segments of the at-risk youth population, such as idle youth, young mothers, or juvenile delinquents. This approach used data sets that contained information about the facets of a young person's life and analytical tools that allowed a simultaneous view of the different dimensions of a young person's life.
- The many different actors shaping the young person's environment are taken into account. This allows policy recommendations to be made not only for national governments, but also for other relevant actors such as subnational governments, the private sector, civil society, families and communities, and the young people themselves.
- The common factors that underlie most kinds of risky behavior are highlighted, and this report argues that a small set of well-chosen policies can have a more profound impact than strictly sectoral interventions.
- The costs of risky behavior, both to the individual and to society, are estimated. These cost estimates should help young people make better personal decisions and help governments across LAC develop better policies to assist at-risk youth.
- This book includes the results of an intensive consultation process among policy makers, practitioners, and academics. As a part of the study, the aim of this exercise was to identify the most appropriate policies and programs to support at-risk youth in LAC. The results include an experts' short list of evidence-based policy options, selected according to the criteria of positive impact, sustainability, cost effectiveness, and efficiency.

This book complements existing research that the international community has been carrying out (CEPAL 2004b; Duryea, Edwards, and Ureta 2003; National Research Council and Institute of Medicine 2005; PAHO 2005; UN 2005a, and World Bank 2006a). It is hoped that this study will fill a gap in the literature by focusing on at-risk youth in LAC, analyzing relevant data and proposed policies and programs that contribute to equity and enhance opportunities for this population.

The Motivation for the Study

People of all ages engage in risky behavior. So why do we need to think about young people differently than adults or children when analyzing risky behavior and making policies to address it? Three key reasons motivated this study: (i) helping at-risk youth can ultimately address broader poverty and inequality challenges in LAC; (ii) the way in which at-risk young people make decisions is different from how adults, children, or even the general youth population make decisions; and (iii) risky youth behavior imposes enormous costs on society and therefore merits significant attention and investment.

Targeting Youth May Be a Starting Point for Reducing Poverty and Inequality in LAC

Figures 1.1 through 1.4 show the age at which people begin engaging in risky behaviors in four countries in LAC. All four figures show a marked increase in risky behaviors during the youth period. In Mexico, school dropout rates are highest for young people between the ages of 15 and 18 years, while inactivity—not being in school or at work—peaks at the age of 15 (figure 1.1). For Haitian girls, sexual initiation peaks at the age of 15 (figure 1.2), and for Chileans of both genders, taking up smoking peaks at the age of 18 (figure 1.3). In Jamaica, violent behavior begins during early youth and increases steadily before peaking between the ages of 21 and 25 (figure 1.4).

Figure 1.1. Share of Each Age Group That Leaves School or Starts Work (Mexico)

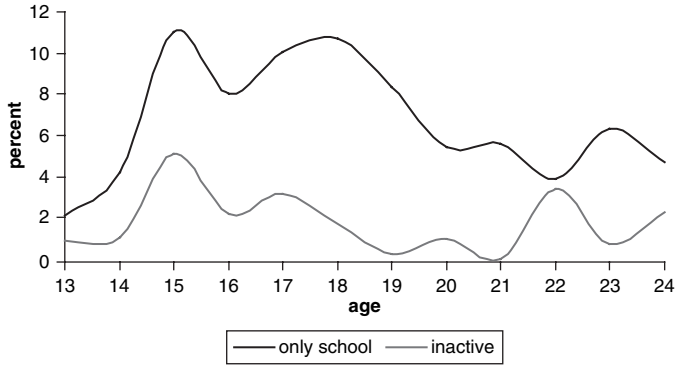


Figure 1.2. Share of Each Age Group Initiating Their Sexual Lives (Haiti)

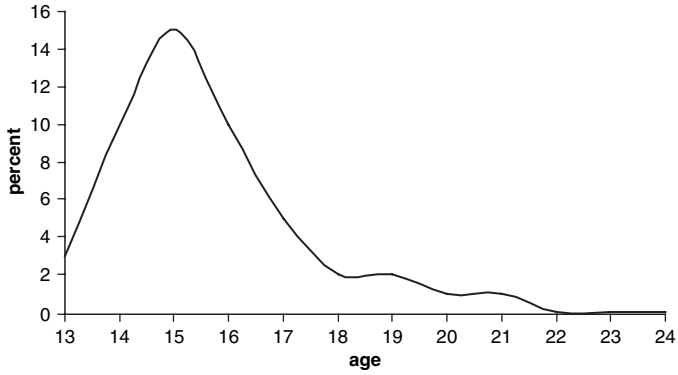
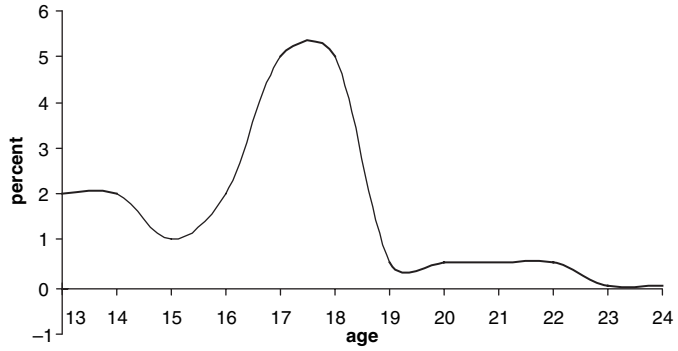


Figure 1.3. Share of Each Age Group That Begins Smoking (Chile)

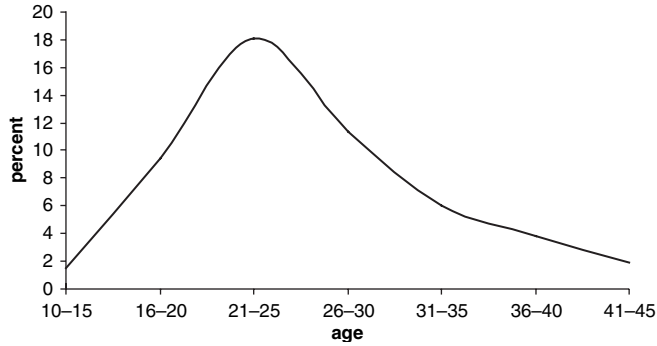


Source: World Bank 2006a.

These kinds of behaviors—early school leaving and idleness, early sexual initiation, violence, and substance abuse—tend to lead to lower long-term productivity and earnings for young people who engage in them. The LAC region has the highest levels of income inequality in the world, and for most citizens of the region, inequality begins during youth. Thus, studying what causes young people to make risky decisions may reveal ways to increase longer-term income and productivity levels, ultimately contributing to the larger goals of reducing poverty and inequality.

By understanding the special needs of at-risk youth, it should be possible to provide this subgroup with more of the opportunities available

Figure 1.4. Distribution by Age of Those Arrested for Criminal/Violent Activity (Jamaica)



Source: World Bank 2007a.

to other young people. At-risk youth tend to live in different circumstances and have different life experiences than other young people, as this book will discuss. Therefore, this report argues that at-risk youth need different types of interventions.

Young People Make Decisions Differently Than Children and Adults

A better understanding of young people can expose the weaknesses of existing youth policies and point to where more effective youth-specific programs and policies are needed. Although young people and adults make decisions in many similar ways, there are some fundamental differences. These differences, even though they may be small, may result in very different choices and behaviors (Furby and Beyth-Marom 1992).

Factors such as peer pressure, the desire to establish independence, and the gradual formation of personal identity influence young people's decisions much more than those of children or adults. It has been demonstrated, for example, that young people put more weight than adults on the reactions of others to their behavior, particularly the reactions of their peers.[2] Compounding the effects of peer pressure, young people often overestimate the extent to which their peers engage in various kinds of behavior. As a result, young people are more likely to make decisions based on how their peers will judge them than on the perceived consequences of their behavior. This approach leads to different outcomes than those achieved by adults faced with the same decisions (Baumrind 1987).

Young people are also more likely than adults to behave impulsively. The stereotype of the "moody adolescent" is supported by scientific evidence. Scientists have found that the part of the brain that regulates impulses, the prefrontal cortex, works less efficiently during youth than other parts of the brain because it is the last to be shaped (World Bank 2006a). This may explain the greater incidence of thrill-seeking behavior among adolescents as compared with adults (Arnett 1994; Zuckerman, Eysenck, and Eysenck 1978).

Conversely, adults are more likely than young people to consider options, risks, and long-term consequences and thus tend to make better decisions (Halpern-Felsher and Cauffman 2001). This may be a matter of experience (in other words, young people have not had the time to amass sufficient experience to inform their decision making) or it may be related to the biological development of the brain (in essence, the area of the brain that regulates decision making, the cerebellum, is still developing during adolescence) (Duryea, Edwards, and Ureta 2003; World Bank 2006a). The ability to think about future consequences develops with age, and the ability to make rational decisions increases concurrently.[3] Furthermore, young people are more likely to act according to their current preferences than to consider the likely preferences of their future, adult selves.

Young people in general also face more constraints than adults because of their dependence on others, a condition inherent in the transition between youth and adulthood. Although it is in the long-term interests of young people to stay out of the labor force and in school as long as possible, this limits their financial resources and thus their ability to experiment and experience the consequences of other dimensions of their world. Youth clearly have different needs than adults based on their distinct constraints, experiences, and decision-making abilities. Consequently, they respond differently to the same incentives or situations. Understanding the specific circumstances of young people will improve the quality of policy making for this group.

At-risk youth also tend to have different decision-making patterns than other young people. Researchers have found that at-risk youth demonstrate less knowledge and exhibit more overconfidence about risky decisions than young people who are not at risk (Jacobs-Quadrel 1990). They also tend to have fewer resources to cope with the consequences of their risky behavior. This crucial fact is another reason why public policy makers need to understand the dynamics of this subgroup and devise effective interventions to help them avoid or mitigate the impacts of risky behaviors.

Youth Development Is a Key Part of Economic Development That Should Be Viewed as an Investment

Budget constraints require governments to target their interventions to those populations most in need. In an unconstrained economic environment, the government ideally would provide support to all young people, whether at risk or not. However, the reality of limited public resources means governments must make choices. This book will show that targeting at-risk youth is a clearly justifiable priority because risky youth behavior produces very large costs for society. Thus, investing in policies to help young people make better decisions is both socially desirable and cost effective.

Policy makers are increasingly recognizing the needs of at-risk youth and targeting more resources to the poorest and the most excluded. However, the most common interventions still focus on the risky behavior itself—youth violence, youth unemployment, or risky sex—and tend to yield short-term benefits. This book highlights the importance of investing in long-term benefits by developing programs and policies to improve the circumstances that at-risk youth face in LAC.

Definitions, Data, and Methodologies

This study targets the subgroup of at-risk youth and therefore depends on a different set of definitions, data sources, and methodologies than studies that focus on the youth population as a whole.

Definitions and Concepts

Youth can be broadly described as the stage during which a person moves out of dependence (childhood) and into independence (adulthood). This book includes in the "youth" category all young people between the ages of 12 and 24, the same age range used by the *World Development Report 2007: Development and the Next Generation* (World Bank 2006a). This age range encompasses individuals who are officially recognized by the United Nations Millennium Development Goals as being in their youth (ages 15 to 24) as well as those whom many would classify as adolescents.[4] (This age range may be adjusted in some chapters of this book because of data limitations. The reader will be alerted whenever a different age range is used.)

At-risk youth can be defined as those who face "environmental, social, and family conditions that hinder their personal development and their successful integration into society as productive citizens" (Barker and

Fontes 1996). They have a greater propensity than their peers to engage in, or be subject to, risky behavior, including school absenteeism, risky sexual behavior, crime, violence, and substance use and abuse. The consequences of these risky behaviors are extremely costly to at-risk youth, affecting their ability to successfully transition to adulthood. Consequences may include such negative outcomes as school dropout, unemployment, teen pregnancy, contraction of sexually transmitted diseases, addiction, incarceration, and social exclusion.

The risky behaviors and outcomes analyzed in this book have been identified as key concerns for the LAC region by governments, civil society, multilateral institutions, and young people themselves (CEPAL 2004b; Dasso 2006; Miodosky 2006; Weiss 2006; World Bank 2006f). They can be mapped to the five life-changing transitions that are discussed in the *World Development Report 2007*: leaving school and continuing to learn, starting to work, developing and maintaining a healthy lifestyle, beginning a family, and exercising citizenship (World Bank 2006a). This book differs from the *World Development Report 2007* in that it focuses on young people who do not succeed in one or more of these transitions due to a range of factors, both within and beyond their control.

Data and Methodologies

This study builds on a body of work carried out in recent years at the country, regional, and global levels, while also drawing on new sources. The team reviewed the rich set of country-specific studies and regional youth studies to draw lessons for at-risk youth in LAC. New analysis was undertaken in areas where there were gaps in the research, including the following:

- *Classifying youth in the region*. To try to quantify the at-risk youth population in LAC, new research was carried out using special youth surveys in Argentina, Chile, and Mexico.[5] A wide set of variables capturing risky behavior, outcomes of such behavior, and contextual factors that may lead to risky behavior were used in a cluster analysis, which identified the number of at-risk young people in LAC, the number of at-risk young people who are doing well, and the general characteristics of each group. The results of this research are reported in chapter 4.[6]
- *Estimating the costs of risky behavior*. Putting a dollar cost on risky behavior informs young people of the price that they and their societies pay for their risky behavior. This information will help young people make better decisions and will help governments develop more cost-effective

investments for their resources. For this book, a methodology was developed to estimate the costs of the negative outcomes of risky behavior, using widely accessible data and a simple spreadsheet. The results are presented in chapter 2.[7]

- *Contextual factors leading at-risk youth to engage in risky behavior*. Research from Brazil, the Caribbean, and Honduras identified these contextual factors, and additional research was carried out in Argentina, Chile, and Mexico to ensure that the results applied across the entire region. The estimation techniques used in the earlier research were used to analyze special youth surveys from Chile and Mexico.[8] Results are presented in chapter 6.
- *Policy for at-risk youth*. A working group of regional and global youth development experts was created to provide input for the policy discussions in the book. Practitioners, policy makers, and academics prepared specific recommendations for policies and programs in LAC to address school dropout, unemployment, risky sexual behavior, substance use and abuse, violence, specific gender issues, and exclusion. Working group members then defined the most cross-cutting and cost-effective interventions expected to have the greatest impact in the LAC context.
- *Information from young people*. The information gained from consultations in Argentina, the Dominican Republic, Mexico, Peru, and the English-speaking Caribbean for the preparation of the *World Development Report 2007* were reanalyzed in the context of at-risk youth. Consultations with experts in Argentina, Brazil, the Dominican Republic, Jamaica, and St. Lucia during the preparation of the country-specific youth studies were also incorporated into the book. Finally, the book team's frequent exchange of ideas with partners in the region informed the topics to be covered in the report and also tested its messages.

The Organization of the Book

This book consists of 10 chapters divided into an introduction and four sections. The introduction presents the analytical justification for focusing on at-risk youth (chapter 1). Section I lays the groundwork for the rest of the book, first by arguing that LAC's youth population will grow over the next decade, threatening to impose enormous costs on LAC governments (chapter 2). Section I also presents an analytical framework for the rest of the book (chapter 3) and defines what is

meant by "at-risk youth." It presents a risk typology for LAC youth, explaining how to identify and quantify the region's at-risk youth population (chapter 4).

Section II introduces the LAC at-risk youth population. Chapter 5 provides quantitative evidence of the behavior of at-risk youth and its implications. It highlights the fact that there are many more at-risk youth in LAC than previously thought, and that behaviors are becoming riskier. These data serve as a warning to policy makers and simultaneously as a tool to improve the targeting and design of programs for at-risk youth. Chapter 6 answers the question of why some young people engage in risky behaviors and others do not, with the intention of giving policy makers some levers to prevent risky behavior.

Section III is concerned with what we—as policy makers, parents, communities, youth-serving nongovernmental organizations, private sector actors, and international organizations—can do to better support young people in the LAC region today. Chapter 7 outlines principles for policy making, drawing lessons from the analysis presented in sections I and II of the book. Chapter 8 provides operational guidance by distilling global "good practices" in youth policy and programming, and interpreting these practices in the context of at-risk youth in LAC. Chapter 9 provides criteria and guidelines for developing a country-level youth portfolio in any LAC country. This section is further developed in a companion volume: *Supporting Youth at Risk: A Policy Toolkit for Middle-Income Countries* (Cunningham, et al. 2008).

Section IV (chapter 10) summarizes the overarching messages of the book and discusses their implications for reforming youth policy at the country level.

Notes

1. Many countries in LAC have government agencies dedicated to serving the youth population, whether as the target of specific public policies or of more general national policies. In recent years, processes have been developed to increase the voice of young people in government. Brazil's *Vozes Jovens* works with the Brazilian government to prepare a youth agenda for the country, and Peru's *Voces Jóvenes* gives regular feedback to the Peruvian government on its policies.
2. Steinberg and Cauffman (1996) found an inverted-U relationship between susceptibility to peer influence (as opposed to self-reliance) and age, with the peak around the age of 14.

3. In particular, older adolescents are more likely than younger adolescents to recognize the risks and future consequences of decisions (Greene 1986; Lewis 1981).
4. It is important to recognize, however, that different country contexts and different sectoral factors imply different age ranges. The official age range for youth in some LAC countries starts as young as 10, and it reaches as old as 35 in other countries.
5. In Chile and Mexico, the special youth surveys were conducted to collect more and better information about young people and youth issues. The data are nationally representative and cover issues ranging from behavior to family characteristics to expectations. The data collection was sponsored by the youth offices of each country. The Argentinean data set was collected by the World Bank for Justesen (forthcoming); it asks both young people and adults about their behavior and about contextual factors that influence it.
6. The methodology and results for Argentina and Mexico are reported in Bagby and Cunningham (2007), and those for Argentina are reported in Justesen (forthcoming).
7. The methodology and results for the costs of secondary school dropout and youth unemployment are presented in Cunningham and García-Verdú (forthcoming). The methodology and results of teenage pregnancy, sexually transmitted infections, and youth violence are presented in Gutiérrez and Bertozzi (2007).
8. The results for Chile and Mexico are presented in Cunningham and Bagby (forthcoming).

SECTION I

Laying the Groundwork

This section has three chapters. Chapter 2 argues that young people, especially those classified as being "at risk," deserve special policy attention because (i) their numbers are large and growing, especially among those most at risk, and (ii) risky behavior by young people costs the LAC region more than 2 percent of gross domestic product annually. Chapter 3 lays out a framework for analyzing youth issues throughout the rest of the book and Chapter 4 identifies at-risk youth in LAC, allowing us to measure the population of this subgroup of youth and to identify observable characteristics that will make it possible to target programs to those most at risk.

CHAPTER 2

Motivations for Focusing on At-Risk Youth

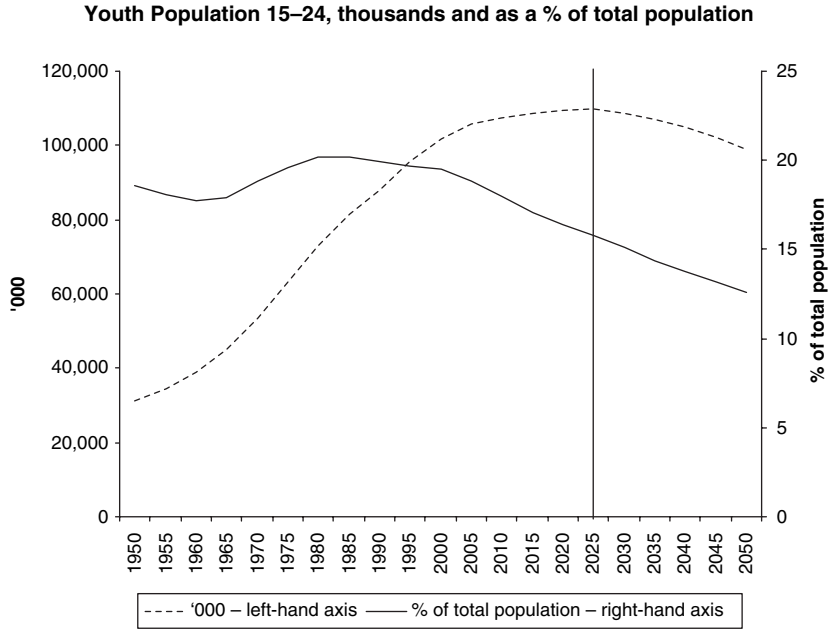
In 2007, the population of the LAC region included approximately 100.6 million young people between the ages of 15 to 24 (see appendix A), an increase of 5 percent from 1995 and almost 100 percent from 1970. People ages 15 to 24 now make up approximately 18 percent of the population of the LAC region and approximately 39 percent of the region's 260 million people who are under the age of 25 (see figure 2.1).

This chapter proposes two motivations for focusing on at-risk youth. First, their numbers are large and growing. Second, their risky behaviors and negative outcomes are costly to themselves and to the development of the region at large.

The Youth Cohort, Particularly Those Considered At-Risk, Is Growing

The number of young people in LAC is expected to grow until 2025. While the share of young people in the total population has been decreasing since the 1980s and is expected to continue to decrease in the near future, there will be 4 million more young people in 2025 than in 2005 (see figure 2.1). The urgent need to address youth issues is rooted, to some extent, in demographics.

Figure 2.1. LAC Youth Population (15–24 Years) in Absolute Numbers and Share, 1950–2050

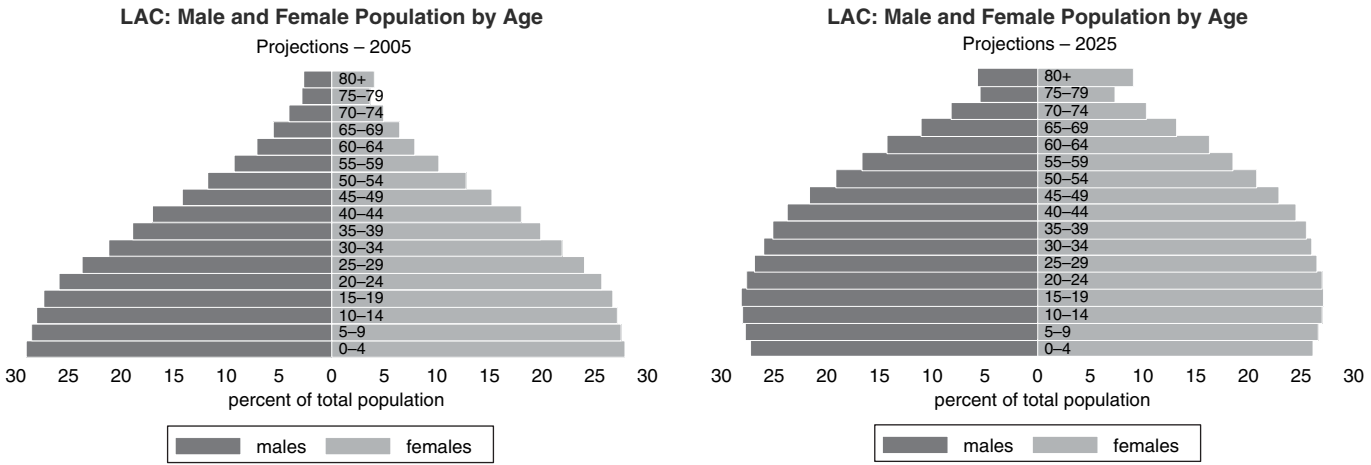


Source: UN World Population Prospects: the 2004 Revision Population Database.

Why is the youth population so large? Although the total fertility rate has been falling throughout LAC (in other words, women are having fewer children on average), the number of young people remains very large as a result of the high fertility in the recent past (National Research Council and Institute of Medicine 2005). As fertility rates decline in the future, the number of young people ages 10–24 will still increase as a share of the total population, producing a "bulge" in the region's population structure. The left panel of figure 2.2 shows that the base for the youngest ages of the classically shaped population pyramid is the largest population group today, but the right panel of figure 2.2 shows that it will not be the largest population group in 2025. Instead, those who are ages 0–10 today will become the population bulge of the 10–24 age group in 2025.

There are a few exceptions to the pattern displayed in figure 2.2. The youth population is already bulging in many countries in the Caribbean as the demographic transition there unfolded much earlier than in the

Figure 2.2. LAC Male and Female Populations by Age Group, 2005 and 2025



Source: UN World Population Prospects, the 2004 Revision Population Database; Population, in millions.

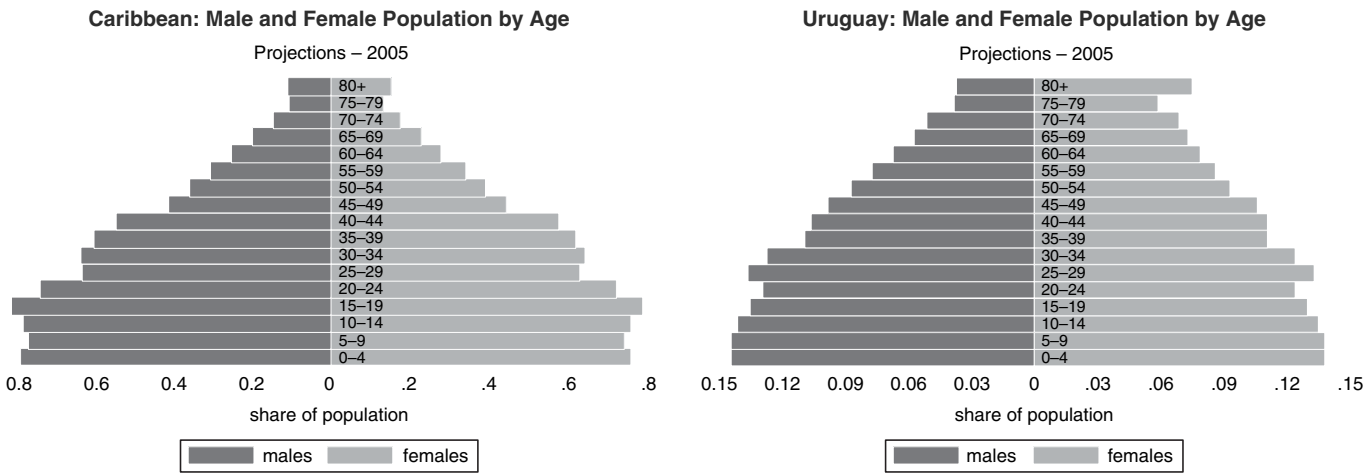
rest of the region (see figure 2.3, left panel), partly because of emigration by adults of childbearing age. Other countries, such as Uruguay (right panel of figure 2.3), have already experienced a peak in their youth numbers as the fertility transition occurred so long ago that the bulge consists of adults ages 25 to 29 years old.

The ongoing changes in the age composition of the population represent a window of opportunity for much of the region. Lower fertility rates mean that today's youth will enter the workforce with fewer dependents to support. Falling dependency ratios and large numbers of young people entering working life can create a "demographic dividend" (World Bank 2006a). An increase in a workforce that has fewer children and elderly people to support can boost economic growth. The rise in labor supply, reinforced by the rise in female labor force participation rates, can increase output per capita, provided that countries are successful in absorbing their growing cohorts of new labor market entrants. In addition, higher savings and investment per capita associated with a rising share of the working-age population can also boost growth. For example, between 25 and 40 percent of the growth rate of real gross domestic product (GDP) between 1965 and 1990 in Japan, Hong Kong (China), the Republic of Korea, and Singapore has been attributed to the growth in the working-age population. And more than 40 percent of the higher economic growth in East Asia than in Latin America between 1965 and 1990 is attributed to faster growth in East Asia's working-age population as well as its better policies for trade and human capital development (World Bank 2006a).

The window of opportunity represented by this falling dependency ratio will close earlier in some LAC countries than in others. The window of opportunity closes when the number of dependents relative to people of working age starts to rise again from an increase in old-age dependency. Depending on the timing and speed of fertility decline, there are four different trajectories for the absolute number of young people (see figure 2.4):

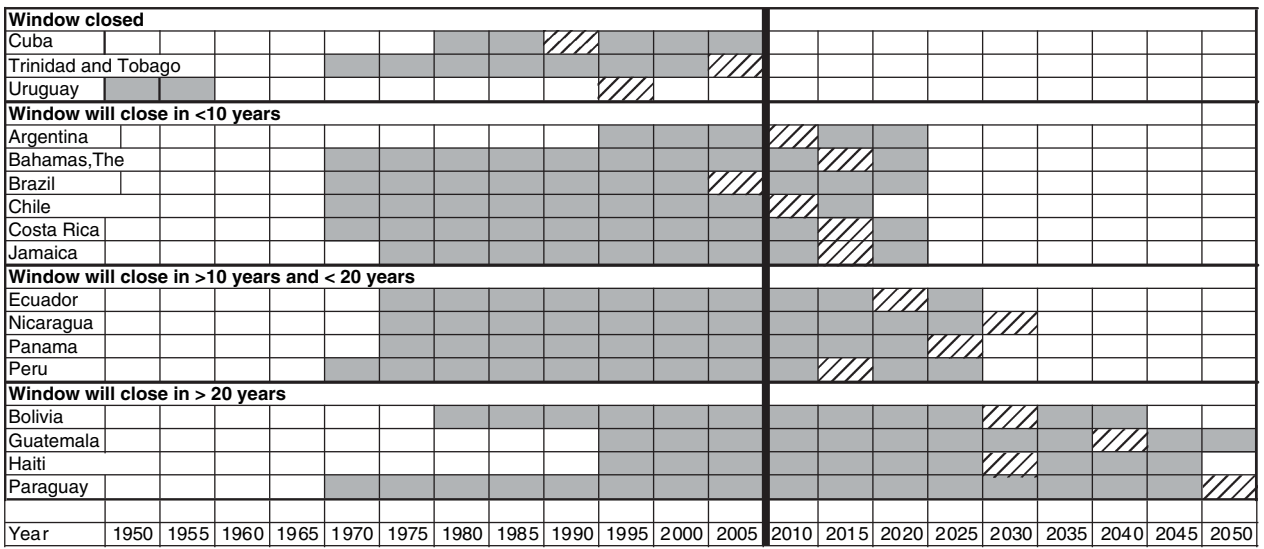
- *Window closed, increasing dependency ratios*. This is the case in countries that have already experienced a transition to low fertility and have seen their youth numbers peak (Cuba, Trinidad and Tobago, and Uruguay).
- *Window closes soon, low dependency ratios now*. These countries will see their youth numbers peak (or plateau) sometime during the period 2005–2010 (Argentina, The Bahamas, Brazil, Chile, Costa Rica, and Jamaica).

Figure 2.3. Changes in the Classically Shaped Population Pyramids



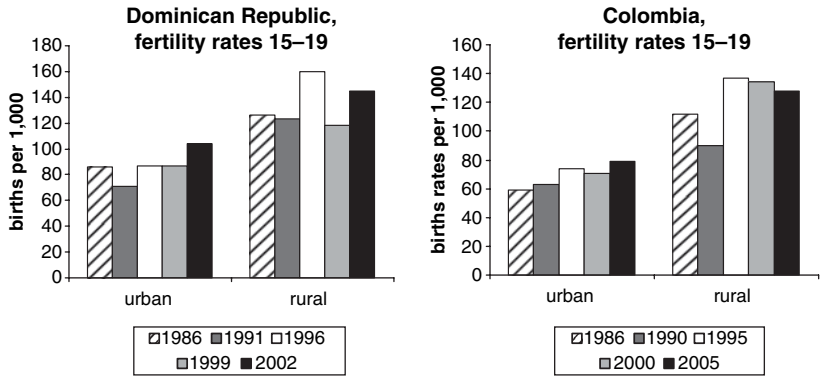
Source: UN World Population Prospects, the 2004 Revision Population Database; Population, in millions.

Figure 2.4. Opening and Closing Demographic Windows of Opportunity



Source: Adapted from World Bank (2006a) using UN World Population Prospects, the 2004 Revision Population Database.
Note: Gray bars show the number of years for which the dependency ratio—the number of dependents relative to people of working age—is falling; the striped box indicates the year of peak youth population.

Figure 2.5. Trends in Adolescent Fertility Rates



Source: Author calculations using data from MEASURE DHS STAT compiler (UNAIDS). http://www.measuredhs.com, February 18, 2007.
Note: Age-specific fertility rates for the three years preceding the survey.

- *Window closes in 10 to 20 years, declining dependency ratios*. These countries will experience a peak between 2010 and 2030 (Ecuador, Nicaragua, Panama, and Peru).
- *Window closes in 20 plus years, high dependency ratios now*. These countries will not experience a peak in the foreseeable future (Bolivia, Guatemala, Haiti, and Paraguay).

The bulge in the *at-risk* youth population is yet to come in LAC. While birth rates are declining for the population on average, young women who we characterize as at risk have higher fertility rates than women who are not characterized as at risk. Figure 2.5 shows that fertility rates are increasing among girls ages 15–19 in urban areas and remain particularly high in rural areas of the Dominican Republic and Colombia. Thus, while the base of the population pyramid is getting smaller for the population in general, it is likely still to be quite large for the at-risk population, implying that their demographic dividend is delayed relative to the national trends.

A large and growing youth population creates challenges for many governments. In particular, LAC countries face the challenges in the health and education sectors.

- *Education*. The increasing cost of enrolling a large number of students in secondary education is the major challenge. The past 20 years have seen an enormous increase in educational enrollments in LAC, but

more than 25 percent of those who begin primary school do not complete secondary school. The per-student cost of providing secondary education is much higher than that for primary education, yet it is critical to improving the conditions of at-risk youth.

- *Health*. In many ways, the health risks facing young people today are greater and their consequences are potentially more deadly than those faced by previous generations. This is most obvious in the spread of HIV and AIDS, with young people accounting for nearly half of all new infections. In addition, a large proportion of young people engages in riskier and unprotected sex, leading to unwanted pregnancies and widespread prevalence of sexually transmitted infections (STIs). Cigarette smoking and binge alcohol consumption, both of which are increasing across the region, also have damaging health consequences.

The Costs of Not Investing in At-Risk Youth Are Very High for Young People, Their Families, and Society

The consequences of risky behavior by young people can be very costly to themselves and to society, often amounting to several percentage points of GDP annually. Making policy makers aware of the magnitude of these costs may change how they choose to allocate public resources and encourage them to invest in preventing and treating the negative consequences of risky youth behavior. In addition, young people who have better information about the full costs of the outcome of their behavior may make better choices.

Four costs are presented in this section, each of which is useful for different actors:

- *Out-of-pocket costs to the government*. These costs are direct cash outlays made by the government and society at large (because government revenue is financed mostly through taxes) as a result of risky behavior by young people.
- *Opportunity costs/forgone benefits to society*. These costs are largely hidden, as they are the lost productivity to the economy and the lost benefits accruing from higher growth as a result of risky behavior by young people.
- *Out-of-pocket costs to the individual*. These costs refer to the money that a person actually spends while engaging in, or coping with the consequences of, risky behavior.

- *Opportunity costs/forgone benefits to the individual*. These costs are also hidden, as they are equal to the benefits that would have been enjoyed by young people and their families if the negative event had not occurred.

A methodology for estimating these costs was developed for this book and is presented in appendix B. It is important to remember that risky youth behavior, in itself, is not necessarily costly, yet it increases the probability that a costly negative consequence will occur. For example, having unprotected sex need not be costly, but it does entail a certain probability that it will result in a costly unwanted pregnancy or STI. Thus, it is the realization of the negative consequence of risky youth behavior that imposes the cost.

Not Investing in Young People Costs the LAC Region Billions of Dollars Annually

Negative youth behavior hampers economic development in LAC, leading to losses of billions of dollars of forgone output. For example, a cohort of young people who leave secondary school early in Argentina—those between 15 and 19 years of age today who are not enrolled in school—will have lower earnings and productivity over their lifetimes than they would have had if they had finished their secondary education. This lower productivity translates into lower output, and the value of this forgone output over this cohort's lifetime was equal to 11 percent of the value of GDP in 2000, or a reduction in annual GDP of 0.3 percentage points per year for the next 35 years. This loss is substantial in the case of Argentina, which has one of the lowest dropout rates in the region, at 20 percent. In contrast, Guatemala, with one of the highest recorded secondary school dropout rates in the region[1] (reaching almost 70 percent), will have output over the next 35 years that is lower by an amount equal to 58 percent of annual GDP, or a reduction in annual GDP of 1.7 percentage points per year because of the large number of school dropouts today (see table 2.1).

Youth unemployment also leads to lower output, though these magnitudes are smaller than the costs of early secondary school leaving because the periods of unemployment are not indefinite. The costs of youth unemployment persist only as long as the young person is unemployed, whereas the costs of dropping out of school affect earnings over a person's entire lifetime. If youth unemployment rates were equal to the average for the total population, GDP would be 0.13 percent (Bolivia) to 0.65 percent (Uruguay) higher each year (see table 2.1).

Table 2.1. Forgone Benefits to Society from Early Secondary School Leaving and Youth Unemployment
As a percentage of annual GDP

Country	Early secondary school leaving[a]	Unemployment[b]
Argentina	11.4	0.40
Bolivia	18.2	0.13
Brazil	14.4	0.39
Chile	n.a.	0.27
Colombia	22.4	0.47
Costa Rica	n.a.	0.26
Dominican Republic	28.2	0.68
Ecuador	30.4	0.40
El Salvador	36.0	0.23
Guatemala	58.8	n.a.
Honduras	n.a.	0.15
Jamaica	15.5	0.48
Mexico	25.5	0.12
Nicaragua	49.3	0.43
Panama	19.0	0.58
Paraguay	n.a.	0.26
Peru	17.1	0.32
Trinidad and Tobago	12.7	0.40
Uruguay	n.a.	0.65
Venezuela	27.6	0.48

Source: Cunningham and García-Verdú, forthcoming.
Note: n.a. = not available.
a. Early secondary school leaving assumes a rate of return to complete secondary education of 30 percent.
b. The cost of unemployment assumes that young people earn 80 percent of adult wages.

Youth violence, teen pregnancy, STIs, and substance use together lower GDP by more than 1 percent annually. The costs of violent acts committed by young people ages 15–24 today reach 1.4 percent of annual GDP as a result of forgone output from premature death, lower productivity at work, and forgone lifetime productivity associated with incarceration (see table 2.2). The cost is low relative to the cost of early school leaving, which ranges from 11 to 58 percent of annual GDP, because the number of violent youths is much smaller than the number of youths who leave school before finishing their secondary education. However, as will be shown later in this book the incidence of youth violence is increasing.

Likewise, the costs to mother and child of an unplanned pregnancy are high, but there are fewer teen mothers than early secondary school leavers. As with youth violence, the number of teen mothers is increasing in LAC. Substance use and STIs impose smaller but substantial

Table 2.2. Opportunity Costs to Society of Risky Youth Behaviors
As a percentage of annual GDP

	Violence	*Unplanned pregnancy*	*HIV*	*HSV2*	*Alcohol use*	*Drug use*
Caribbean	0.23	n.a.	0.036	n.a.	n.a.	n.a.
Dominican Republic	1.25	0.63	0.065	0.114	0.37	0.3
Ecuador	1.39	1.20	0.059	0.105	0.25	0.24
Mexico	1.33	1.14	0.0003	0.0006	0.91	0.086

Sources: World Bank 2003a (for the Caribbean); Gutiérrez and Bertozzi 2007 (for the other countries).

opportunity costs. The costs of substance addiction account for up to 0.4 percent of GDP according to most of the costs estimated in table 2.2. While HIV and the herpes simplex II virus (HSV2) have very high per-unit costs, their total costs for a youth cohort are only 0.1 percent of GDP. This is mainly due to the very small numbers of people whose productivity is affected by these outcomes.

The governments' out-of-pocket costs of coping with negative youth behavior are small relative to the opportunity costs, which may be one reason why governments have so far underinvested in young people. Unplanned pregnancy, HIV, HSV2, and substance use cost national treasuries less than 1 percent of annual GDP in the three countries analyzed (see table 2.3). The cost of unemployment is very small because government spending in LAC to assist the unemployed is very low,[2] and early school leaving actually *reduces* the cost to the treasuries because it reduces spending on marginal education expenditures. According to di Gropello (2006), LAC countries spend between US$173 and US$5,613 on education per student annually. The decrease in cost from early school leaving is not equivalent to the per-student cost of education as some educational inputs may benefit many students simultaneously (such as teachers and school buildings). Nonetheless, if large numbers of youth are not in school, the savings can be substantial. Since the financial costs are tangible, policy makers may be erroneously using these values in their cost-benefit investment decisions rather than the larger, and more appropriate, opportunity cost estimates.

Young People and Their Families Pay Heavily for Negative Youth Behavior

Young people may also underestimate the costs of risky behavior, which is consistent with the high prevalence of all kinds of risky behavior by LAC youth.

Table 2.3. Out-of-Pocket Costs to Society of Risky Youth Behavior
As a percentage of annual GDP

	Early school leaving	*Unemployment*	*Unplanned pregnancy*	*HIV*	*HSV2*	*Alcohol use*	*Drug use*
Dominican Republic	<0	ε	0.002	0.063	0.048	0.99	0.75
Ecuador	<0	ε	0.0016	0.051	0.039	0.32	0.24
Mexico	<0	ε	0.0011	0.0001	0.0001	0.89	0.086

Source: Gutiérrez and Bertozzi 2007.
Note: ε = the cost is too small to be measured. <0 = a negative cost (savings).

The net present value of forgone earnings over the working life of those who do not complete secondary school are on average equal to five times annual GDP per capita in LAC. The regional low is in Argentina, where those who complete secondary school will take home 345 percent of annual GDP per capita higher earnings over their lifetimes than those who do not complete secondary school. The regional high is in Guatemala, where the lost income over a lifetime of not completing secondary school is equivalent to 688 percent of annual GDP per capita. Over the next 35 years, this is equivalent to lower earnings each year of 19.7 percent of per capita GDP.

The personal opportunity cost of unemployment is lower than that of dropping out of school, but it is still equal to 38 percent of regional GDP per capita. In Argentina, unemployed young people forgo earnings equivalent to 26 percent of annual GDP per capita, while those in Trinidad and Tobago are forfeiting income equal to 44 percent of annual GDP per capita. Again, the costs are lower than those for school leavers because unemployment imposes temporary costs as opposed to a lifetime of forgone earnings (see table 2.4).

The personal consequences of risky sexual behavior and substance use are equal to three to five times annual GDP per capita. Unplanned pregnancies are responsible for forgone personal earnings over a lifetime equal to more than 300 percent of annual GDP per capita, when taking into account the higher-than-average school dropout rate among pregnant girls and the implications of this for earnings over their lifetimes (see table 2.5). This estimation does not include the forgone benefits to their children, who are also more likely to be teen parents and to drop out of school. The costs of HIV and STIs are lower but still substantial. Substance use again imposes enormous costs on the young person over his or her lifetime, equaling more than five times annual GDP per capita. Lost income from lower on-the-job productivity, high absenteeism, and premature death contribute to these high costs.

Table 2.4. Lifetime Opportunity Cost/Forgone Income to the Individual as a Result of Early Secondary School Leaving and Youth Unemployment
As a share of annual GDP per capita

	Secondary school dropout	*Unemployment*
Argentina	345.8	26.2
Belize	542.6	n.a.
Bolivia	469.1	36.7
Brazil	389.3	33.1
Chile	n.a.	36.1
Colombia	407.4	32.2
Costa Rica	n.a.	35.0
Dominican Republic	496.3	42.0
Ecuador	510.5	39.6
El Salvador	573.5	41.5
Guatemala	688.4	n.a.
Honduras	n.a.	43.0
Jamaica	631.7	45.6
LAC	486.0	38.7
Mexico	467.1	35.5
Nicaragua	619.9	40.8
Panama	514.7	42.4
Paraguay	n.a.	37.2
Peru	448.9	35.7
Trinidad and Tobago	503.2	44.0
Uruguay	n.a.	28.6
Venezuela	486.0	35.8

Source: Cunningham and García-Verdú, forthcoming.
Note: n.a. = not available.

Table 2.5. Lifetime Opportunity Costs to the Individual of Risky Behavior
As a percentage of annual GDP per capita

	Unplanned pregnancy	*HIV*	*HSV2*	*Alcohol use*	*Drug use*	*Violence*
Caribbean	n.a.	n.a.	n.a.	n.a.	n.a.	6.0
Dominican Republic	146.2	81.9	14.6	233.9	233.9	n.a.
Ecuador	288.4	161.5	28.8	461.4	461.4	n.a.
Mexico	339.6	190.2	34.0	543.4	543.4	n.a.

Source: Gutiérrez and Bertozzi 2007 (for the Dominican Republic, Ecuador, and Mexico); World Bank 2003a (for the Caribbean).
Note: n.a.= the cost was not estimated.

Out-of-pocket costs are incurred *after* the consequences of the risky behavior have occurred. As a result, the actual behavior, which is the variable in the young person's mind when making the decision, does not appear to cost anything. If a young person assumes that he or she will

not become an addict or a teen mother—as most of them do—then these costs are equal to zero in their minds, while the benefits of engaging in the activity are positive. As we will point out in the next section, young people, particularly at-risk youth, underestimate the probability of negative consequences. Even if a young person believes he or she might experience the negative consequence of a certain risky behavior, the subjective probability they will assign to this state of nature might be lower than the true probability.

Drug or alcohol addiction imposes particularly large out-of-pocket costs on young people and their families. Table 2.6 shows that the out-of-pocket cost of alcohol or illegal drug use is equal to almost five times annual GDP per capita in the three countries where this was estimated: the Dominican Republic, Ecuador, and Mexico. These very high costs are the result of the high price of rehabilitation programs and medical treatment associated with addiction and the payments made to the legal system to adjudicate injuries and property damage to others as a consequence of the addiction.

The out-of-pocket costs of violence and risky sexual behavior are lower but still substantial. Youth violence imposes cash layouts that are equivalent to three times annual GDP per capita. These costs include payment to others for property damage and legal fees. Risky sexual activity resulting in teen pregnancy imposes only modest costs, less than 1 percent of GDP per capita, because the cost of prenatal care is low and, although complications are more common in teen pregnancies than in adult pregnancies, the prevalence is rare. HIV and STIs impose out-of-pocket expenses for medical treatment and care, but they do not involve the very high legal costs and property and personal damage that make violence and substance abuse so costly.

The out-of-pocket costs of early school leaving are negative in table 2.6. This is explained by the fact that school attendance has costs. For example, the cost of secondary school attendance is equivalent to

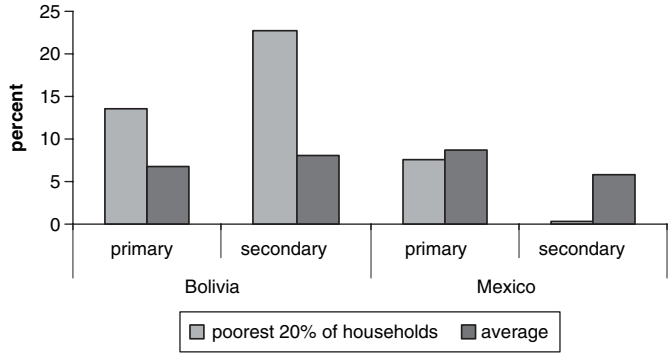
Table 2.6. Out-of-Pocket Cost to the Individual of Risky Youth Behaviors
As a percentage of annual GDP per capita

	Early school leaving	*Unemployment*	*Unplanned pregnancy*	*HIV*	*HSV2*	*Alcohol use*	*Drug use*	*Violence*
Dominican Republic	<0	ε	1.0	79.3	6.1	483.3	483.3	320.1
Ecuador	<0	ε	1.0	140.1	10.8	470.6	470.6	320.1
Mexico	<0	ε	1.0	59.3	4.6	473.4	473.4	320.1

Source: Gutiérrez and Bertozzi 2007.
Note: ε = the cost is too small to be measured. <0 = a negative cost (savings).

Figure 2.6. Out-of-Pocket Costs of School Attendance in Bolivia and Mexico, as a share of household income

By grade level and by income level of the household



Source: Adapted from di Gropello 2006.

7 percent of average household income in Bolivia, but it is equal to 23 percent of the income of the poorest households (see figure 2.6). The household no longer incurs this cost when a child leaves school early. Some programs are now aimed at addressing this cost; Mexico's cash transfer program *Oportunidades*, for example, compensates for much of the costs of secondary school attendance to the poorest 20 percent of Mexican households.

Finally, the out-of-pocket costs of unemployment are relatively small and thus not included in table 2.6. As will be discussed in chapter 5, young people search for work through informal channels, thereby incurring low financial costs.

The Full Costs of Risky Youth Behavior Are Even Higher

Many of the actual costs of the consequences of risky youth behavior are not considered in the calculations presented here. Although these costs are important, some of the costs may not be possible to quantify because no information is available to do so (for example, data on the prevalence of certain risky behavior, such as youth violence or teen pregnancies, and estimates of their costs). Other sources of information may be of poor quality or may be too rare to make it possible to replicate the cost exercise across countries. As a result, most of the estimates presented above should be considered as lower bounds of the true costs. Following are some nonquantifiable costs that should be considered in addition to those estimates presented in tables 2.1–2.6.

Lower life expectancy and poorer health among the less educated. Those with less education tend to have lower life expectancy and poorer health than those with more education. More educated parents have healthier children, leading to less infant mortality, higher birthweights, and better health of adolescents in terms of oral health, obesity, and anemia (Grossman and Kaestner 1997). This is not because of the higher incomes of households with more education, but instead because better-educated people have greater knowledge of good health practices and a greater understanding of the benefits of investing in health care (Grossman and Kaestner 1997).

Less democracy, volunteerism, and cultural expression among the less educated. Those with higher levels of education tend to be more engaged in their communities, as expressed in higher rates of volunteerism, greater participation in and contributions to cultural expression, and more democratic participation (Diamond 1992; Haveman and Wolf 1984).

Skills obsolescence among the jobless. While young people are unemployed or inactive (neither in school nor working), the human capital that they acquired in school or in previous work experience begins to stagnate. Also, those who have been unemployed or inactive for longer periods tend to have more difficulty getting another job (Fares, Montenegro, and Orazem 2006; World Bank 2006a).

Slower development of children born to teenage mothers. Children born to teenage mothers tend to have more behavioral problems, including a greater propensity to engage in violence (Donohue and Levitt 2001; Russell-Brown, Engle, and Townsend 1994) and lower educational attainment (Russell-Brown, Engle, and Townsend 1994). They are also more likely to be teen parents themselves (Maynard 1996). As a result, they are less productive citizens and make fewer contributions to society at large, while the state collects lower tax revenues from them and has to deal with higher crime costs.

Teen mothers' greater demands on the social protection system. Teenage mothers tend to have lower earnings than women who wait until adulthood to have their children because they leave school early and they have less job experience. There are also fewer job opportunities for single mothers. As a result, the state spends more on these young women in terms of unemployment insurance, child nutrition programs, foster care, and cash transfers (Maynard 1996).

Social exclusion of at-risk youth. Young, unmarried mothers may be excluded from their homes or be otherwise stigmatized by their societies, resulting in psychological costs to the young women and the lost benefits

of belonging to a community. Young people who are out of school are out of the main social institution for people their age. This may discourage them from participating actively in society, seeking out other public institutions to help them to navigate their youth years, and limit their positive peer-group interactions, thus putting them at even greater risk. Unemployment or inactivity contributes to social exclusion because the individual is not part of one of the largest institutions in any country—the labor market. Furthermore, if jobs are scarce, young people—who tend to engage in risky behavior more than adults—may try to enter illegal labor markets, which will further exclude them from mainstream society.

Higher abortion costs and maternal mortality. As legal abortions are relatively difficult to obtain and young people have fewer resources to obtain safe abortions, it is possible that the number of illegal abortions in this group may lead to higher health costs over their lifetimes as well as some premature deaths of those having illegal abortions.

Loss of return from investments in individuals who die from AIDS. The early investments made by society and families in people who contract AIDS and die young yield lower returns than if those individuals had lived to their full lifespan. Parents invest in their children's schooling and nutrition partly in the hope that they will benefit from those investments later, when their children will be earning enough money to support them in their old age. The state invests in the education and nutrition of children in the hope that they will grow up to be productive citizens of society who will pay taxes and contribute to the overall richness of the culture and the economy. AIDS cuts short the realization of returns to those investments and may lead to underinvestment in future populations with higher HIV incidence.

The loss to society of the potential of those who die from AIDS in their prime. Individuals help to build rich societies. The premature deaths of young men and women deny their societies the immeasurable contributions that they may have made to culture, democracy, arts, and knowledge.

Greater costs of victimization. Youth crime imposes physical and mental health costs on the victims, which the individual or state pays to cure in terms of hospital care, victim groups, court cases to recover damages, and lost earnings (Roman and Farrell 2001). Moreover, potential victims of crime also incur the psychic costs associated with a positive probability that they will become actual victims.

Security costs related to youth crime. Both the state and individuals invest substantial resources to protect themselves from youth criminality. Some security measures—such as slum upgrades, new lighting, and

community outreach—impose new public expenditures, and the state also bears the costs of rehabilitating youth offenders. The investments made by private citizens in private guards, security systems, bars on their windows and doors, and changes in their behavior to avoid being victimized are substantial but are not easily measured, and thus they are not included in our cost estimates presented earlier.[3]

Lower tourist receipts. Tourists tend to shy away from crime-laden vacation spots, leading to a 5 percent reduction in tourist flows for a 10 percent increase in youth crime (Levantis and Gani 2000). It is estimated that youth crime alone is responsible for a 4 percent decrease in tourist receipts in Jamaica (World Bank 2003a).

Why Young People and Governments Underestimate the Costs of Risky Youth Behavior

Given the costs of risky youth behavior to the government, the individual, and the families, why do young people continue to engage in such behavior? One reason may be that young people fail to recognize the future costs of their current behavior. Incomplete information or myopic behavior may lead them to underestimate the costs. This may also be true of governments that fail to anticipate the future costs of current risky youth behavior and thus fail to take actions today to prevent that behavior or mitigate its effects. This is the case, for example, with teen smoking and alcohol and drug abuse, which may have costs both for young people and for national public health systems—cost that materialize only several decades after the risky behavior itself. If governments are shortsighted in how they view the consequences of this behavior, they are likely to underinvest in interventions designed to prevent young people from engaging in these risky kinds of behavior in the first place. Policy makers also need to consider how best to help young people truly understand the current and future costs of risky behavior so they can make more informed decisions about their own behavior.

Another possible reason for this myopia on the part of governments is that most of the costs of the consequences of risky youth behavior are not direct monetary costs but rather opportunity costs in the form of forgone productive resources or profitable investment opportunities. For example, as noted earlier, by leaving school early, young people actually cost the treasury less than if they had stayed in school as the government no longer pays to provide them with public education. Nevertheless, there are long-term costs to both the individual and society to early school leaving: forgone earnings from higher wages associated with positive rates

of return to each additional year of schooling. Thus, governments that are not paying or even accounting for these indirect costs are likely to be systematically underinvesting in youth.

When considering a strategy for investment in young people, certain trade-offs need to be borne in mind. For example, although public expenditures for an unemployed young person is low and expenditures for an individual with HIV is high, the government spends more money on unemployment than on AIDS because far more young people are unemployed than have AIDS. However, when we consider the lost benefits to society, the cost of not providing services for HIV patients is higher than the cost of not providing unemployment benefits. A rigorous cost-benefit analysis of specific interventions is necessary to identify the portfolio of youth-focused programs that will have the highest return to investment.

In conclusion, the youth population in the LAC region is increasing, and the number of at-risk youth in LAC is growing even more rapidly. These trends highlight the importance of identifying the public and private investments that are needed to reduce the risks facing youth, recognizing the corresponding costs to the young person and society, and helping those who are already facing problems. The next chapter presents a conceptual framework to help us organize our thinking and identify behaviors and their causes that will form the basis of our discussion of policy making in the third section of this book.

Notes

1. Haiti, Honduras, and Paraguay may have higher school dropout rates, but the data for these countries are not available.
2. A few countries in the region—for example, Brazil, Chile, Colombia, and Uruguay—have unemployment insurance programs drawn from public funds. While unemployed young people are theoretically eligible for these programs, it is highly unlikely that they would meet the stringent qualifying criteria, which usually require a substantial period of time paying into the unemployment insurance system (in other words, being employed in the formal sector), and this is unlikely in the case of the less educated (Cunningham 1997, 2003). Thus, we can conclude that the out-of-pocket costs to the government of youth unemployment are low.
3. It can be argued that, while expenditures on private security measures require monetary outlays by the person who purchases the services, they are income to those who provide the service, thus being a transfer of resources from one member of society to another, with no net loss.

CHAPTER 3

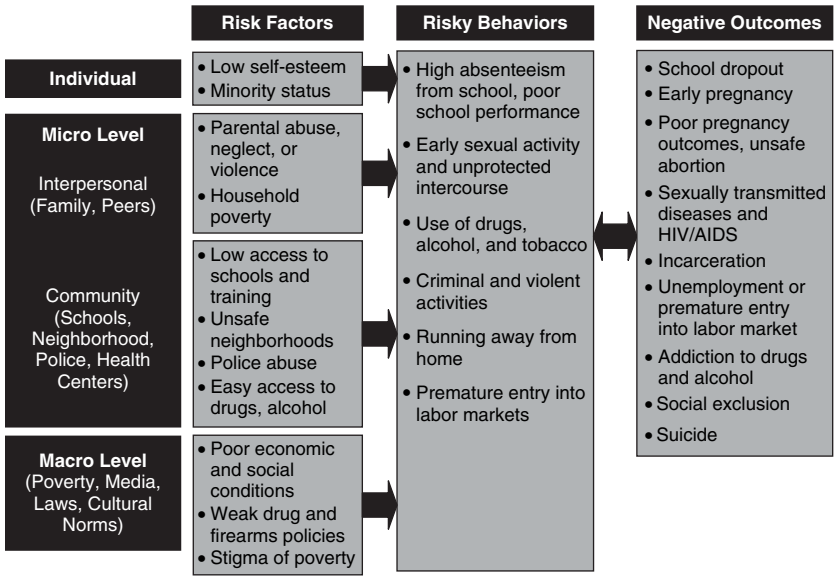
A Conceptual Framework and Its Application for Policy Making

The conceptual framework adopted for this book draws on a rich set of literature focusing on the causes, consequences, and prevention of risky youth behavior across a range of disciplines (CEPAL 2004b; U.S. Surgeon General 2001; WHO 2002, 2004c; World Bank 2003a, 2006a, 2006b). At each stage of the life cycle, an interrelated set of factors affect individual preferences, behavior, choices, and outcomes. Identifying the factors that have a significant impact on youth behavior and outcomes—and their subsequent adult outcomes—can provide policy makers with a useful framework to guide both policy and program choices.

The Conceptual Framework and Definitions

In this book, we take a life-cycle approach to the issue of risky youth behavior. We hypothesize that young people's decision making is shaped by events and contexts during their childhood as well as by the information and constraints that they face. The consequences of young people's choices are felt far into the future, not only by the individuals who made the choices, but by society at large. Figure 3.1 gives a schematic view of this conceptual framework.

Figure 3.1. Conceptual Framework for Youth at Risk: Link between Risk Factors, Risky Behavior, and Negative Youth Outcomes



Source: Authors.

Starting with the second column, risk factors are contextual aspects that increase the likelihood that youth will engage in negative behavior. For example, research from the United States shows that young people who experience physical or sexual abuse in their homes are more likely to engage in violence and other risky behaviors themselves. Conversely, protective factors (not presented in figure 3.1) seem to prevent these kinds of behavior.[1]Protective factors are those that have been associated with reducing negative outcomes or increasing the likelihood that a young person will make a positive transition to adulthood. For example, studies undertaken in the United States to assess a range of factors in reducing risky youth behavior indicate that school attendance and family and social connectedness are among the most important protective factors in reducing substance use (alcohol, cigarettes, and marijuana), violent or deviant behavior, early sexual experience, and pregnancy among secondary school students (Blum, McNeely, and Rinehart 2002; Udry 2003). The risk factors presented in figure 3.1 are those identified by the U.S. literature. Chapter 6 of this book considers whether these factors are important in the LAC context.

The third column of figure 3.1 shows risky behaviors. These are actions that hinder human capital development and successful integration of a young person into society. They include sporadic school attendance, poor school performance, working in settings that are damaging to a young person's development (including premature entry into the labor market and working in illicit activities), having unsafe sex, participating in criminal or violent activities, drug dealing, and substance use and abuse (including alcohol). The model hypothesizes that young people who have many risk factors and few protective factors have a higher chance of moving from column 2 to column 3 of figure 3.1.

The final column of figure 3.1 presents negative outcomes that, for the unfortunate, result from risky behaviors. These include situations such as early school leaving, adolescent pregnancy, addiction to drugs or alcohol, and incarceration. Because of the out-of-pocket costs of these outcomes—to both the individual and society—this is where the key concerns of policy makers currently lie. Yet, once a young person has experienced these outcomes, it is often very costly to return them to a positive path of development, as will be demonstrated in chapter 9.

This book will categorize young people by the degree of risk in their lives (U.S. Surgeon General 2001):

- *Type 0*—Young people who have none of the major risk factors discussed.
- *Type I*—Young people who have risk factors (the characteristics of column 2) present in their lives but who have not yet engaged in risky behavior. For example, young people categorized as type I risk include those living in disadvantaged situations and who risk falling out of the formal school system, becoming jobless, or running out of family support.
- *Type II*—Young people who have engaged in risky behavior (the behaviors in column 3) but have not yet suffered any negative consequences. Those who are categorized as type II may often be absent from school but have not yet dropped out, be involved in risky sexual behavior but have not acquired a sexually transmitted disease, or be involved in delinquent activities but have not been arrested.
- *Type III*—Young people who have suffered the consequences of risky behavior as shown in the fourth column.This group would include, for example, school dropouts, pregnant adolescents, incarcerated youth, alcoholic or drug-addicted youth, or HIV-positive youth.

These risk typologies will be defined more thoroughly in the context of LAC in chapter 4, and this terminology will be used throughout the book.

It is useful to group each risk and protective factor (second column of figure 3.1) by the level at which each factor manifests itself to facilitate the deeper discussion in chapter 6. The three rows in the first column of figure 3.1 represent the three groupings of risk factors:

- The *individual level*—the first row of figure 3.1—refers to factors related to the cognitive, physiological, and behavioral nature of the individual, much of which are determined in early childhood (UNESCO 2007; Walker et al. 2007; WHO 2002, 2003b; World Bank 2002, 2005a, 2006a). Some individual risk factors are biological—such as race, sex, or ethnicity—while others are strongly influenced by environment—such as presence and intensity of rage and violence (Blum and Ireland 2004; World Bank 2003a). Other individual risk factors may be learned and have a strong impact on whether or not a young person engages in risky behavior. For example, children may be taught to have low self-esteem, leading them to drop out of school or engage in risky sexual behavior during their youth. By contrast, protective factors at the individual level include strong self-esteem and social skills, a positive self-image, and spiritual belief.
- The *micro level*—the second row of figure 3.1—refers to the institutions and individuals with which a young person interacts on a personal basis. *Interpersonal relationships* such as those with family members, friends, intimate partners, teachers, and peers have a central role in influencing whether young people choose to engage in risky behaviors. Of these, the general literature finds that the family is the primary source of both risk and protective factors. Key risk factors include abuse and violence in the household; parental substance abuse; general violence, including corporal punishment; and household poverty (Blum 1998; McNeely et al. 2002; Resnick and Hojat 1998). C*ommunities* also have an important influence on whether young people engage in risky behavior. Community-related factors include the availability and quality of schools, neighborhood safety, police presence, and relationships with other young people in a community. As with families, schools play a central protective role in the lives of young people, especially in the secondary school years when young people are much more prone to adopting risky behavior (Blum, McNeely, and Rinehart 2002; Blum and Rinehart 1997). It is important to note that young people may rely more or less heavily on certain types of micro-level factors at different stages of their development.

For example, peers become increasingly influential in the early teens, although parents continue to play an important role.

- The *macro level*—the last row of figure 3.1—refers to the systems and institutions that affect an individual but with which the individual does not have direct contact. These include overall economic conditions, income inequality, the media, laws, and cultural norms. For example, macro-level factors that contribute to youth violence include economic and social policies that maintain socioeconomic inequalities between people, the availability of weapons, and a weak judicial system. They also include social norms relating to male dominance over females and parental dominance over children, as well as cultural norms that endorse violence as an acceptable way to resolve conflicts (Guerra 2006; WHO 2002).

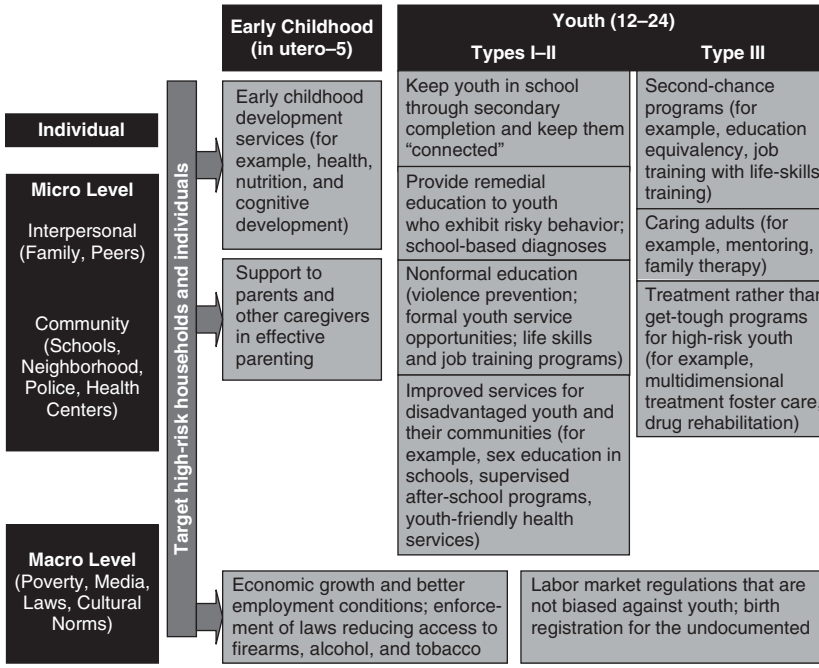
Moving from the Conceptual Framework to Policy

Identifying the factors that contribute to risky behavior and finding a causal relationship with negative youth outcomes enable policy makers to devise specific policies and programs for reducing the numbers of youth at risk. Figure 3.2 illustrates how the conceptual framework can be applied to determine the most appropriate policy responses to different types of risk throughout the life cycle. It has the same rows as figure 3.1 but puts the risk/protective factors, risky kinds of behavior, and negative outcomes in the back, and brings to the front various policies to minimize risk factors and encourage protective factors, mitigate risky behavior, and manage negative outcomes throughout the life cycle.

While far from being exhaustive—a wider range of policies will be covered in section III of this book—figure 3.2 provides a schematic notion of the types of policies that might be appropriate for preventing risk and remediating its negative outcomes. It does not include actions targeted to children ages 6 to 11, which are clearly important years in a child's development, because the focus of this book is on ages 12 to 24. However, it does include the early years (ages 0 to 5) because of the fundamental importance of interventions in these years in preventing risky behavior later on.

This framework will form the skeleton of the book. The rest of the book will identify the LAC-specific characteristics to fill out figure 3.1 (chapters 5 and 6) and use those as the basis for a LAC-version of

Figure 3.2. Conceptual Framework for Youth at Risk: Policy Application



Source: Authors.

figure 3.2 (chapters 7–9). Before moving to this exercise, though, we have one more task for laying the groundwork: identifying the size of the at-risk youth population in LAC.

Note

1. Most of the research does not establish (or show the absence of) a causal link between the factors and the behavior, showing instead strong correlations. Thus, while risk factors may not necessarily be causal factors, at the very least they can be important predictors of future behaviors.

CHAPTER 4

Identifying At-Risk Youth for Better Programming and Targeting

Young people in Latin America and the Caribbean are a heterogeneous group, requiring a mixed set of policies to respond to the distinct needs of different groups. While we can characterize young people by age, race, geographical location, gender, and many other attributes, this study will define them in terms of the risk categories that were discussed in chapter 3. This chapter categorizes LAC youth according to risk types 0, I, II, and III, and describes the characteristics and the challenges facing each group. Box 4.1 describes the methodology used to capture the multidimensionality of young people in LAC. The chapter also selects easily observable variables that can be used to identify young people within each risk type and to target prevention and second-chance programs to those most in need of them.

A Characterization of At-Risk Youth

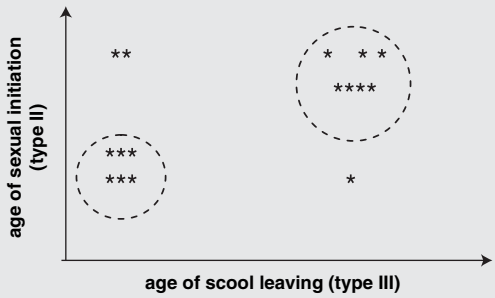
More than half of the youth population in LAC can be considered to be at risk. Figure 4.1 shows that up to 34 percent of Mexicans ages 12 to 24 can be considered to be risk type III, meaning that they are already facing the consequences of their risky behavior, while 25 percent of Argentines can be classified in this same category. A smaller share of the youth

Box 4.1

Methodology for Creating a Typology of Youth at Risk in LAC

If at-risk youth could be characterized by a single variable, it would be easy to measure who is at risk and who is not. However, young people are multidimensional, doing well in some areas and poorly in others. A methodology that simplifies the many characteristics of youth allows us to understand who is at risk.

To achieve this end, we can use a method known as "cluster analysis," where observations that share similar characteristics are grouped together and can be given an identity based on the common characteristics of the group. Let's assume that "at-risk youth" can be characterized by two observable variables: early school leaving and early sexual initiation. When we plot these two variables against each other for youth in LAC, we have a graph that looks as follows:



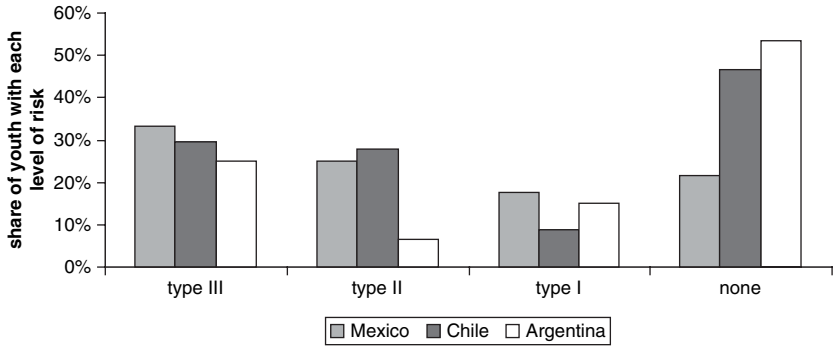
In this graph, each star represents an individual. This gives us two distinct groups of young people or clusters. One cluster, that in the upper right corner, can be considered not at risk because the individuals in it started their sexual lives later and they left school at a later age, while those in the cluster in the lower left corner, who had sex early and left school early, are our "at-risk youth" cluster. The graph shows a variance within each cluster, since some in the same cluster left school earlier than others, for example. Most of the sample is in one of the two clusters, but there is one person who started having sex at a young age but stayed in school (bottom right), and two who left school early but started sexual activity late (top left). These young people show that, while most of the sample clusters together in distinct groups, there will be outliers who engage in some kinds of behaviors but not others.

This example is simplistic; it assumes only two variables, whereas we actually use dozens of variables to characterize the youth population. If we include

(*continued*)

all of these variables in the figure above, we will have a multidimensional set of axes, which cannot be displayed graphically but which can be modeled mathematically. We use mathematical tools (described in appendix C) and variables capturing risk/protective factors, behavior, and outcomes to assign young people to various clusters. We then examine the characteristics of each cluster and, based on those characteristics, we can assign a risk type I, II, III, or 0 to each cluster.

Figure 4.1. Shares of the Population in Argentina, Chile, and Mexico by Level of Risk

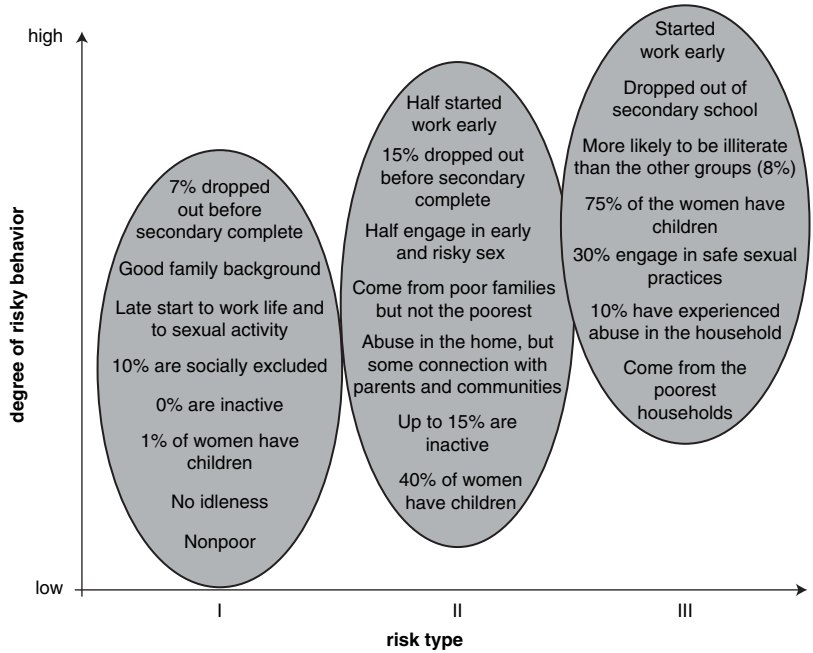


Source: Bagby and Cunningham 2007 (for Mexico and Chile); Justesen, forthcoming (for Argentina).

population in LAC—fewer than 25 percent—can be categorized as risk type II, in that they are engaging in risky behavior but have not yet experienced the negative consequences. Those classified as risk type I range from 9 percent in Chile to 17 percent in Mexico. These young people have background factors that can be expected to lead to risky behavior, but they are not yet engaging in those kinds of behavior. Finally, and optimistically, a total of more than 20 percent of young Mexicans and about 50 percent of young Argentines and Chileans neither have factors in their lives that are expected to lead to risky behavior nor are they engaging in such behavior. Looking inside each group gives us more detail about the experiences and reality of the young people in each risk category. This discussion is summarized in figure 4.2.

Young people who are classified as risk type III have abundant risk factors and few protective factors, engage in risky behavior, and have experienced the negative consequences. The common characteristics of this group appear in the far right bubble in figure 4.2. None of the

Figure 4.2. Characterization of LAC Youth with Different Levels of Risk



Source: Derived from Bagby and Cunningham 2007.

young people in this group completed secondary school. Most started their risky behavior at a young age: early entry into the labor force and early sexual activity often result in adolescent pregnancy. All of the women and about half of the men are inactive, in other words, neither in school nor working. For women, inactivity is particularly associated with motherhood. This group reports weak family cohesion, substance abuse in the household, physical abuse in the home (about 10 percent of the sample), poor relationships with their parents (60 percent), and feelings of social exclusion. In Mexico, the country with the youngest sample, 14 percent of children ages 12 to 14 can already be classified as type III risk. They have almost all dropped out of school, 10 percent are illiterate (more than any other risk group), half of the boys are inactive, and three-quarters of the girls are inactive. There is no information on sexual behavior for this group, but very few of these girls are married.

Those who are classified as type II risk engage in fewer kinds of risky behavior than those who are type III, and the type II have stronger

protective factors in their lives. Type II young people have started engaging in risky behavior—early school leaving, early labor force entry, and early sexual activity—but they are not experiencing the negative consequences. While the young people in type II may have avoided some of the type III outcomes because they started engaging in risky behavior later than those in type III (for example, their literacy rates are higher than those of type III dropouts), if they continue their risky behavior, they may evolve to type III. The type II group has more of a sense of being connected to parents, local institutions, or society in general compared with those classified as type III, but type II also has the highest rates of domestic abuse in the whole sample. Among the youngest group, the 12- to 14-year-olds in Mexico, no one has yet dropped out of school, but they have started working. Although these young people have generally good relationships with their parents, their early entry into the workforce may be the first step toward other risky behaviors.

The 10 to 20 percent of the population classified as type I risk are not engaging in risky behavior now, but their sense of belonging and mental health state put them at risk of engaging in these kinds of behavior later in life. These young people are still in school, did not start work early, and did not begin their sexual lives early. However, they have weaker connections with their families than those in the type 0 risk category, and they have stronger feelings of social exclusion. This group consists of two different types of people. One subgroup consists of younger people who may yet engage in risky behavior and thus may be on their way toward type II risk. The other subgroup is older and can be classified as "resilient." These are young people who have all the factors that predispose them to engaging in risky behavior, but they are able to overcome these negative influences to make healthy choices.

Young people who do not have a risk type classification—they could be called type 0—have strong protective factors and few risk factors and engage in few risky behaviors. Among the younger groups, all are in school. Among the older groups, all finish secondary school and more than three-quarters are in postsecondary school. This group is not idle, not parents, and not married. They started work and sexual activity at a later age than the other groups. One in five participates in community activities, and more than 90 percent feel a sense of social inclusiveness. They also have the best relationships with their parents of any group, and their parents teach them negative attitudes toward drugs and alcohol and reinforce positive behavior. These young people also come from the least poor households in the sample.

A small group of young people do not fit well into any group. For example, 1 percent of Chilean girls ages 15 to 17 who are classified as type 0 risk have given birth. They are still in school, they do not use drugs or alcohol, they are not violent, they are not working, they come from wealthy homes, and they have supportive parents; but in this one outcome—teen pregnancy—they differ from their peers in the type 0 risk group. For another example, 3 percent of type III Chilean boys ages 15 to 17 did not initiate sexual activity early, although they are school dropouts, idle, violent, and come from unsupportive backgrounds. These exceptions suggest that even though most young people in a risk category share a common set of factors and behavior, some deviate from the group norm.

Using the Risk Typology for Targeting Prevention Programs

This risk typology gives us an in-depth characterization of young people, but it is rare for such a rich data set to exist. Instead, policy makers usually have only a few observable characteristics with which to identify those who are risk type I and need prevention programs versus those who are risk type III and need intensive second-chance programs. The existing typology presents some variables that may be a simple way to classify young people by risk type and thus to target specific types of policies or programs toward the right subgroup of young people. Table 4.1 lists variables that may be used to identify risk types without the full set of variables used in the previous exercise. They are easily observable, available in most data sets, and readily understood. Although table 4.1 presents results only for Chile, similar patterns also emerge for Mexico. When we analyze this table more closely, it yields targeting variables for us to test in the next section of the book and to use in our discussion of targeting in the last section of the book.[1]

Poverty is a good proxy for risky behavior. On average, those classified as risk type III came from the poorest households, while those classified as risk type 0 came from the least poor households. Table 4.1 shows this for Chile, and the data from Mexico and Argentina support this conclusion in those countries as well. This is not to say that poverty causes young people to engage in risky behavior (we will discuss that hypothesis in chapter 6), but instead it is a correlation that can be useful for targeting purposes.[2] The best proxies are parental education level or measures of household durables

Table 4.1. Allocation of Poor, Indigenous, Rural, and Young/Older Youth across Risk Types in Chile

Risk level	*Type III*	*Type II*	*Type I*	*Type 0*
% of total sample	16.8	28.0	8.7	46.5
Poverty (proxied by parental education)[a]	Primary school completed (poor)	Some secondary school	Some secondary school	Secondary school completed (less poor)
% of youth ages 15–17	8.3	20.4	15.9	55.5
% of youth ages 18–24	22.2	32.8	4.2	40.8
% of indigenous	21.7	26.3	8.7	43.3
% of not indigenous	16.3	28.2	8.7	46.9
% of rural	27.2	29.5	7.0	36.3
% of urban	15.3	27.7	9.0	48.0

Source: Bagby and Cunningham 2007.
Note: This exercise was also carried out using Mexican data, with similar conclusions.
a. Various poverty proxies were used, including household income per capita, ownership of durable goods, and parental education. All had similar results.

as they are better reflections of the general economic status of the household, as compared with the less precise, but still adequate, alternative proxy of household income.

The share of the youth population that is risk type III increases with age. More than 22 percent of 18- to 24-year-olds are categorized as risk type III, compared with only 8.3 percent of 15- to 17-year-olds. The older youth have had the most time to engage in risky behavior and to experience its negative consequences.

Ethnicity and rural residence are a second level of proxies for risk. Indigenous young people and those living in rural areas are overrepresented in the type III risk group. While 16.8 percent of all young people are classified as type III, 21.7 percent of indigenous and 27.2 percent of rural young people are in this category. In contrast, 43.3 percent of indigenous and 36.3 percent of rural young people are risk type 0, while 46.5 percent of all young people are in this category. The data point to two conclusions for targeting. Indigenous and rural young people are more at risk than others and perhaps need greater support. Yet by targeting only indigenous or rural young people, policy makers will not reach the majority of at-risk youth, as most of them are not ethnic minorities or rural dwellers.

Using the Risk Typology for Targeting for Second Chances

As shown above, type III young people are experiencing the results of several kinds of risky behavior, and type II young people are engaging in many of these behaviors. Thus, while we may observe only one or another kind of behavior, young people are likely to be engaging in many more. In fact, table 4.2 shows the high co-occurrence of different kinds of risky behavior—in other words, the high probability that young people engaging in one kind of risky behavior actually engage in several.

The best proxy for targeting second-chance programs is dropping out of school. This is much easier to observe than risky sexual behavior or violence, and, as shown in table 4.2, it is correlated with all other kinds of risky behavior. As shown in the risk profiles above, those in risk type III all dropped out of school early, while those in risk type II are in the process of dropping out of school and are engaging in other types of risky behavior. Box 4.2 presents further research supporting the correlation between early school leaving and all other risky behavior.

The risk profiles also showed that early labor force entry may be a gateway risk—a behavior that leads to other kinds of risky behavior. While child labor is often more difficult to observe than early school leaving, it can be used to identify at-risk children.

Conclusions

The number of young people in LAC is large and growing, especially the population who are most at risk. Youth at risk constitute more than half of the total population ages 12–24 in LAC. Some of these young people have the factors that predispose them to risk, others

Table 4.2. Co-Occurrence of Risky Behaviors by Youth

	Inactivity	*Risky/early sex*	*Substance use*	*Violence*
Dropout	B, C, Ch, M	C, Ch, M	B, M	B, M
Inactivity		B, C, Ch, M	C, M	C, M
Risky/early sexual behavior			B, C	B, C
Substance use				B, C, M

Sources: Cunningham and Bagby, forthcoming (for Chile and Mexico); Koller et al. 2005 (for Brazil); World Bank 2003a (for the Caribbean).

Note: Data drawn from four countries/regions: Brazil (B), Caribbean (C), Chile (Ch), and Mexico (M). Countries are included in the table if the correlation is significant at the 5 percent level. Not all behaviors were tested in all countries. No information was available on substance use for Chile, and limited information was available on violence for Mexico.

Box 4.2

Co-Occurrence of School Dropout and Other Risky Behavior

Education is a key factor that affects other risky behavior. Low levels of education are found to have a high correlation with the following risky behaviors:

- *Crime and violence.* Juvenile delinquency is correlated with lower levels of education (Barker and Fontes 1996). This may be due to the low cost to these young people of engaging in criminal behavior (Eckstein and Wolpin 1999), the absence of positive social influences from mentors and peers who would normally be in the school environment, or delinquency being the best income alternative for an individual with few marketable skills.
- *Risky sexual behavior.* Less-educated young people are more likely than their more-educated peers to engage in risky sexual behavior. This may be due to the lower cost to them of engaging in such behavior; an absence of resources such as teachers, school nurses, and counselors to advise them about these decisions; an absence of an ability to reason or bargain; or a lack of information about responsible sexual activity.
- *Substance use.* Young people who are not in school are more likely to use alcohol, tobacco, and illegal drugs (Barker 1995), all of which impose additional costs on the individual, his or her family, and society.
- *Unemployment*. Unemployment rates are highest among those who did not complete secondary school.

are already engaging in some risky behavior, and others are coping with the negatives consequences of their behavior.

A set of easily observable variables makes it possible to identify at-risk young people: household poverty, ethnicity, and school dropout. These variables can be used to identify the at-risk population and select the best policies and programs to tackle the problems. In the next chapter, we will focus on the at-risk youth population in LAC and on the trends and causes of their behavior and outcomes.

Notes

1. Gender (or, more appropriately, sex), while an easily observable target variable, is not included in table 4.1 because the data do not allow a comparison of male and female risks. Questions about some factors, behavior, and outcomes were

asked only of women, while others are asked only of men. Thus, higher risk may be a reflection of the sample frame rather than an accurate reflection of which sex is more at risk.

2. Poverty could play two roles in the risk typology presented. One possibility is that parents of poor young people may be risk type III themselves, and thus teach these kinds of behavior to their children, while less poor parents may not have these characteristics. Alternatively, nonpoor young people may engage in risky behavior, but their families have the financial resources to stop the behavior or to cope with the consequences, while poor families may not have this option.

SECTION II

Informing Policy by Understanding the Trends and Causes of Risky Behavior in LAC

This section provides background information to help policy makers design programs and policies that are most appropriate for at-risk youth. Chapter 5 presents the current situation regarding at-risk youth in LAC by mapping out the negative kinds of behavior that these young people engage in and the damaging outcomes that they experience as a result. The chapter not only highlights the most common kinds of risky behavior, but also shows that today's young people are engaging in these behaviors at a younger age than those of past generations and the behaviors in question are becoming riskier. Furthermore, it shows that the social, economic, and biological realities of today's world put young people at greater risk than ever. Chapter 6 examines why some young people engage in risky behavior and others do not. It briefly reviews the existing literature and also introduces new analyses to highlight measures that may be effective in preventing young people from engaging in risky behavior.

CHAPTER 5

Understanding the Nature and the Magnitude of Risky Behavior

This chapter gives a brief description of risky behavior in the LAC region along five main lines: leaving school early without learning, being unemployed and inactive, engaging in risky sexual behavior, engaging in crime and violence, and engaging in substance use and abuse. It is intended to be brief because these trends are covered in detail in other studies about youth in the LAC region. However, the section differs from the other studies: it gives special attention to those who are at risk, as defined in the previous chapter, as opposed to considering the entire youth population.

Leaving School without Learning

Children and young people who drop out of school or fail to learn while in school fail to develop fundamental skills and abilities that are difficult to acquire later in life. The youth years are a particularly important period for building human capital for four reasons. First, many types of learning occur more easily or even exclusively during childhood and youth. Those who fail to develop certain skills before a given age may not be able to develop them at a later stage in life.[1] Second, those who do engage in remedial or adult education programs find it more difficult and more costly to acquire basic knowledge and skills as adults than during childhood

and youth (Carneiro and Heckman 2003). Third, because human capital acquired during the youth years will return benefits for longer than investments made later in life, it has a higher return than investments made later in life. Finally, as shown in the previous chapter, early school leaving and low learning are associated with a higher risk of engaging in substance abuse, risky sexual activity, teen pregnancy, crime and violence, and higher levels of unemployment and inactivity.

Equality in educational opportunities is particularly important in LAC as a way to reduce the inequality and poverty that characterizes the region. Education is one of the main determinants of income, and higher levels of education are associated with a higher degree of intergenerational mobility. Part of the observed income inequality in LAC is probably the result of differences in educational opportunities rather than differences in ability or effort. To the extent that a group of young people in LAC do not enroll in school or enroll late, drop out, or are promoted slowly through the school system, they are not taught (or do not learn) adequate skills and abilities, which will perpetuate the high inequality and low social mobility found in LAC.

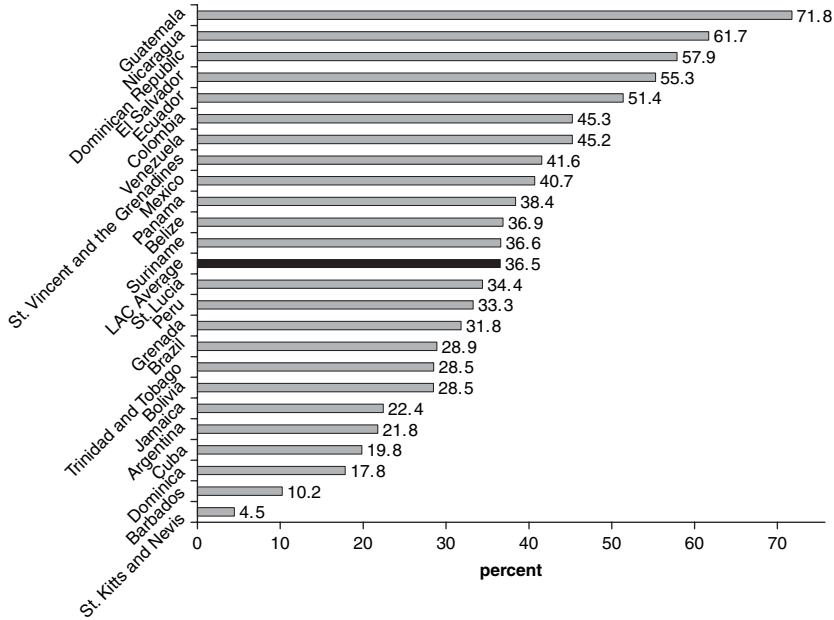
Secondary Education Is the New Challenge in LAC

Thirty million school-age children and young people in LAC are not enrolled in school (risk type III) or lag significantly behind their corresponding grade (risk type II). One out of every three secondary school-age young person in LAC is not enrolled in secondary school. For the region, the percentage of secondary school-age children who are not enrolled in secondary school ranges from a low of 4.5 percent in St. Kitts and Nevis to a high of 71.8 percent in Guatemala (see figure 5.1). These young people may have dropped out of school or may be held back in primary school to repeat the lower grades.

Despite significant advances in primary school attendance in LAC, 6.5 percent of school-age children and young people in LAC never enrolled in primary school or dropped out at the primary-school level. This is a very small problem in Argentina, which has only 0.8 percent of young people in this situation, but up to 13.9 percent of young Guatemalans will not even have a basic education (see figure 5.2), let alone complete secondary school.

Children and young people from low-income households have significantly lower schooling attainment than those from less poor households. As figure 5.3a shows, the gap in the highest grade completed between young people from the richest 20 percent and those from the poorest 40 percent of the income distribution reaches 32 or 33 percentage

Figure 5.1. Percentage of Secondary School-Age Children Who Are Not Enrolled in Secondary School (Average 1998–2004)



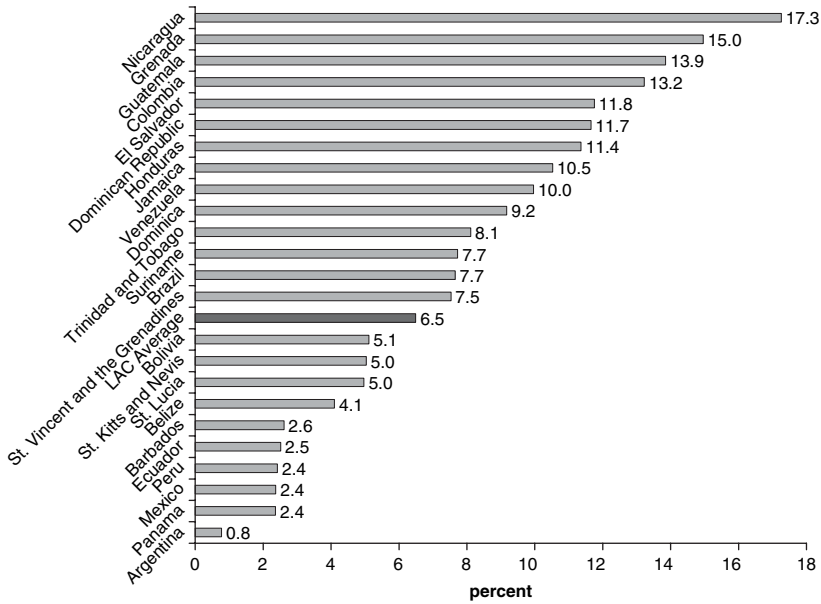
Source: Authors' calculations based on World Bank 2006b.

points by grade 9.[2] Although this gap begins growing from the first grade onward, it widens noticeably after the completion of primary education (grade 6), in other words, during the youth period.

Children and young people from households in rural areas have significantly lower schooling attainment than their peers in urban areas. The gap between young people from households in rural areas and those from households in urban areas in terms of the highest grade completed is 22 percentage points by grade 9. As is the case with the gap between income groups, the gap between regions begins growing from the first grade onward and widens noticeably after the completion of six years of education (see figure 5.3b).

Today's young people in LAC have more education than their parents' generation. Figure 5.4 shows that for every country in the region without exception, the average number of years of completed education has increased since the 1960s until today. An expansion of access to education at all levels, mostly among the younger generations during the period 1960 to 2000, led to a doubling in the average number of years of schooling attained.[3] As a result, today's young people are the most educated generation in the history of LAC.

Figure 5.2. Percentage of Primary School-Age Children Who Are Not Enrolled in Primary School (Average 1998–2004)



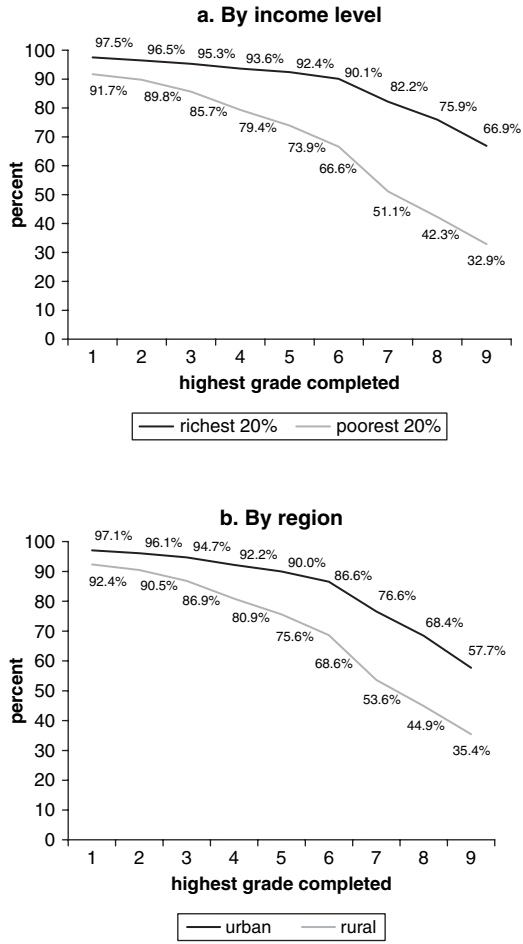
Source: Authors' calculations based on World Bank 2006b.

But today's young Latin Americans are at a greater disadvantage than their parents' generation because LAC has fallen behind relative to other regions that had similar education levels in the 1960s, such as Southeast Asia (figure 5.4). While the expansion in access to education among the younger generations in LAC is a positive development, it has not been sufficient to keep up with the world.[4] Also, more emphasis has been placed in LAC on expanding primary education and, to a lesser extent, tertiary education than on the expansion of secondary education (see figure 5.5). Since most economies in LAC are more open to trade and financial flows today than in the past, this implies greater competition from countries and regions where educational attainment has risen faster. Thus, today's young people in LAC may be in a less advantageous position than their parents' generation.

Quality of Education

Education quality indicators show that the vast majority of young people in LAC are failing to attain the most basic skills, abilities, and

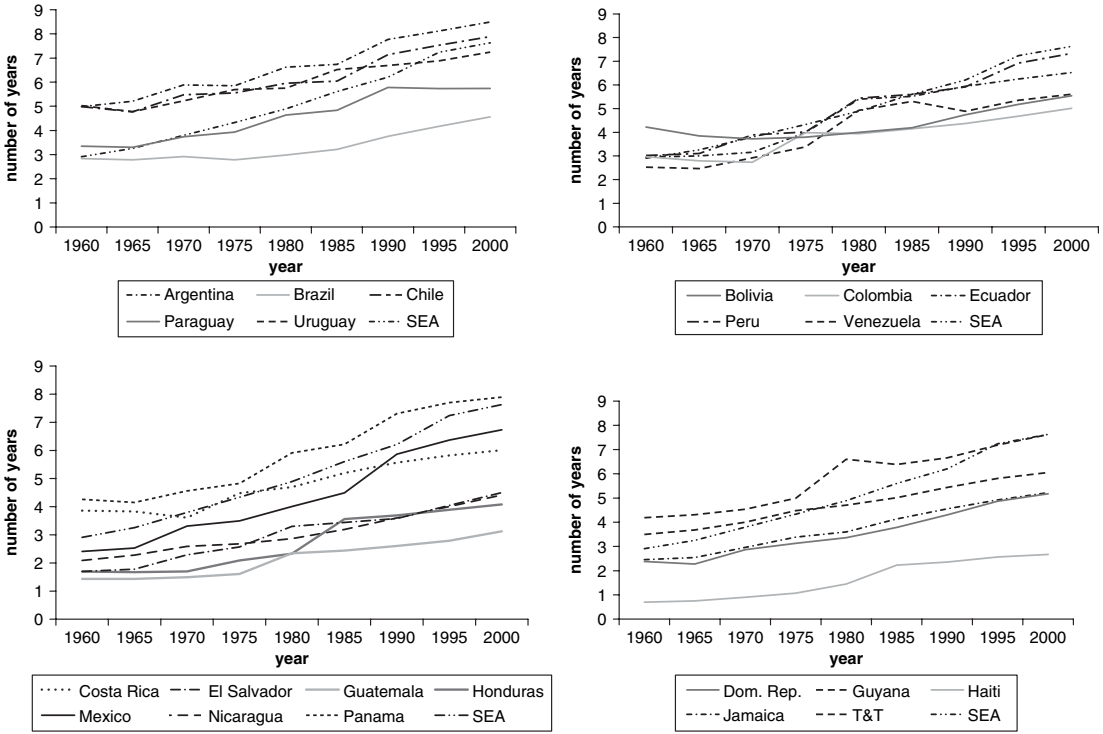
Figure 5.3. Schooling Attainment for Ages 15–19 in LAC, Circa 2000



Source: Authors' calculations using data from Filmer (2006).
Note: The graph depicts the nonweighted average of the following 18 countries and the corresponding years: Bolivia (2002), Brazil (2001), Chile (2003), Colombia (2000), Costa Rica (2001), the Dominican Republic (2000), Ecuador (1995), Guatemala (2002), Guyana (2000), Haiti (2001), Honduras (1995), Jamaica (2002), Mexico (2002), Nicaragua (2001), Panama (1995), Paraguay (2001), Peru (2002), and Venezuela (2001).

knowledge. A comparison of scores from the Programme for International Student Assessment (PISA) across the world[5] shows that average student achievement among 15-year-old students in participating LAC countries falls short of the average of countries from the Organisation for Economic Co-operation and Development (OECD) and even that of

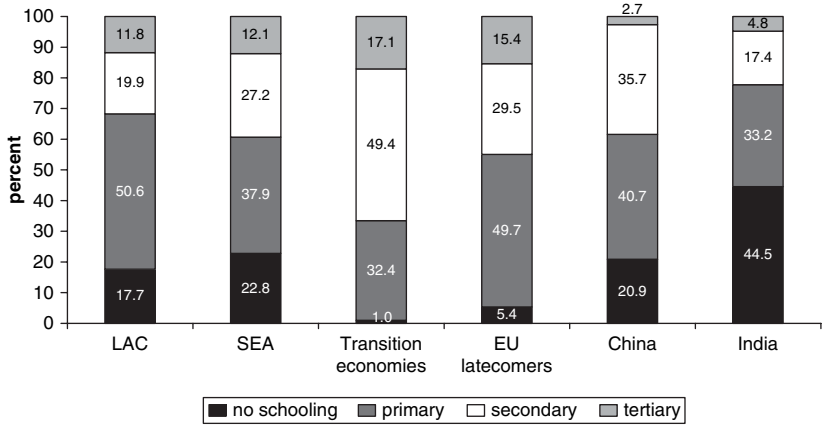
Figure 5.4. Average Years of Schooling in LAC Countries Compared with Southeast Asia, 1960–2000



Source: Authors' calculations using data from Barro and Lee 2001.
Note: SEA = Southeast Asia. T&T = Trinidad and Tobago.

Figure 5.5. Percentage of the Population 25 Years and Older Who Have at Least Some Schooling at Each Education Level, 2000

(*population-weighted country averages*)

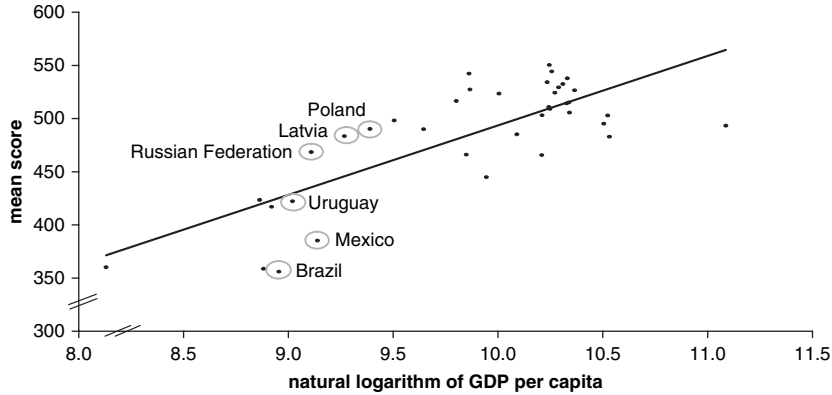


Source: Authors' calculations using data from Barro and Lee 2001.
Note: SEA = Southeast Asia. EU = European Union.

other developing and transition countries. For example, the percentage of students who scored below Level 1[6] on the proficiency scale for reading in 2003 was nearly 27 percent in Brazil, 25 percent in Mexico, and 20 percent in Uruguay, compared with 6.1 percent of 15-year-old students in the OECD (excluding Mexico). The percentage of students who scored below Level 1 on the proficiency scale for mathematics in 2003 was nearly 53 percent in Brazil, 38 percent in Mexico, and 26 percent in Uruguay, while 7.3 percent of students in the OECD (excluding Mexico) scored below Level 1. Even after taking into account the lower levels of per capita GDP of LAC countries relative to the OECD countries, LAC students still underperform relative to the OECD and relative to other countries with similar levels of per capita GDP, such as Latvia, Poland, and the Russian Federation (see figure 5.6).

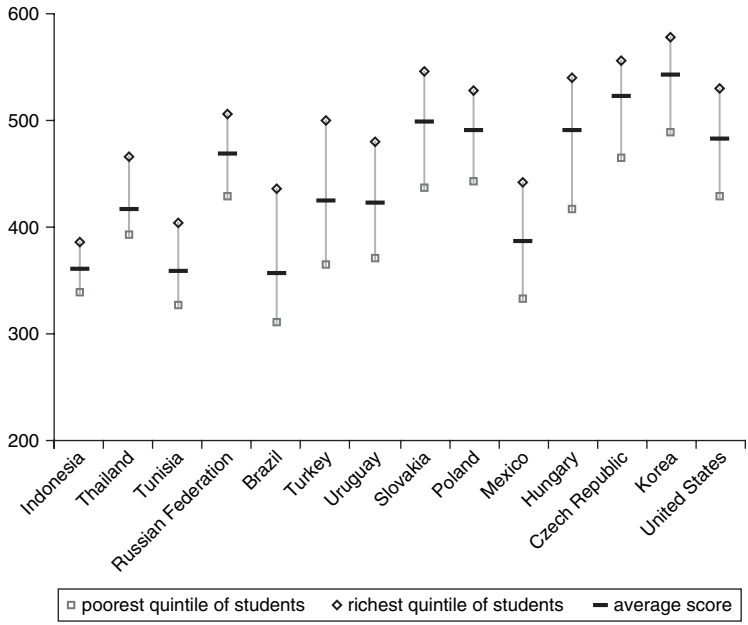
Young people from poor backgrounds perform particularly poorly on the PISA, a fact that raises questions about equity in the distribution of learning opportunities.[7] Figure 5.7 shows the average math scores for the poorest, least poor, and average-income 15-year-old students in Brazil, Mexico, Uruguay, and several comparable OECD countries. In all of the countries, students from poor families performed worse than those from nonpoor families, but the worst scores in the graph were from the poor in LAC (as well as in Indonesia and Tunisia). The gap in

Figure 5.6. Average Score in the Mathematics Scale in PISA 2003 and GDP Per Capita (purchasing power parity adjusted) in 2003



Source: Authors' calculations based on PISA data from OECD (2004) and on GDP per capita from the World Development Indicators 2006 (World Bank 2006b).
Note: Unlabeled dots represent OECD countries, excluding Mexico.

Figure 5.7. Average PISA Scores by Country and by Household Poverty Level, 2003



Source: World Bank 2006a.

learning between the poorest and the wealthiest—measured by the length of the line in figure 5.7—is particularly large in Brazil and Mexico (and Turkey). This indicates not only that the poorest young people learn the least, but also that improvements are feasible in those countries. Unfortunately, even the best-off students in Mexico and Brazil scored below the average of half of the countries in the sample, namely the transition economies.

In sum, education systems in LAC countries have expanded access to primary education but have given too little attention to preparing young people for, or providing access to, the secondary level. Given the demographic trends, the increase in the demand for admission to secondary school, particularly among at-risk youth who are likely to need additional supports, is expected to continue in the foreseeable future and will become one of the most pressing challenges for policy makers in the years to come.

Difficult Integration into the Labor Market: Joblessness and Job Turnover

Among the many challenges facing young people throughout the world, one of the most critical is the process of leaving school, entering the labor force, and finding a good job. Young people generally face more adverse conditions in the labor market than adults, including higher unemployment rates, lower labor force participation rates, higher turnover, and a higher incidence of informal employment or unpaid family work.[8] Unemployment and inactivity early in a person's working life have their immediate costs, but they may have adverse consequences many years into the future, too, including lower labor force participation and higher adult unemployment (World Bank 2006a). Youth unemployment and inactivity have been found to be associated with a higher probability of engaging in risky behavior, including substance abuse, risky sexual activity, teen pregnancy, crime and violence, and early school leaving.

By the age of 17, 75 percent of Latin America's young people have left school, and 6 to 14 years later, more than half of them are working. The transition of a youth cohort from students to workers starts as early as age 12 in the Andean countries—lasting more than 14 years in some countries—and as late as 17 in Argentina (see table 5.1). Male transition periods start a year earlier and are half the length of those of females. This is largely due to women's other main activity in early adulthood: childbearing (World Bank 2007b).

Table 5.1. School-to-Work Transition Period in Select LAC Countries

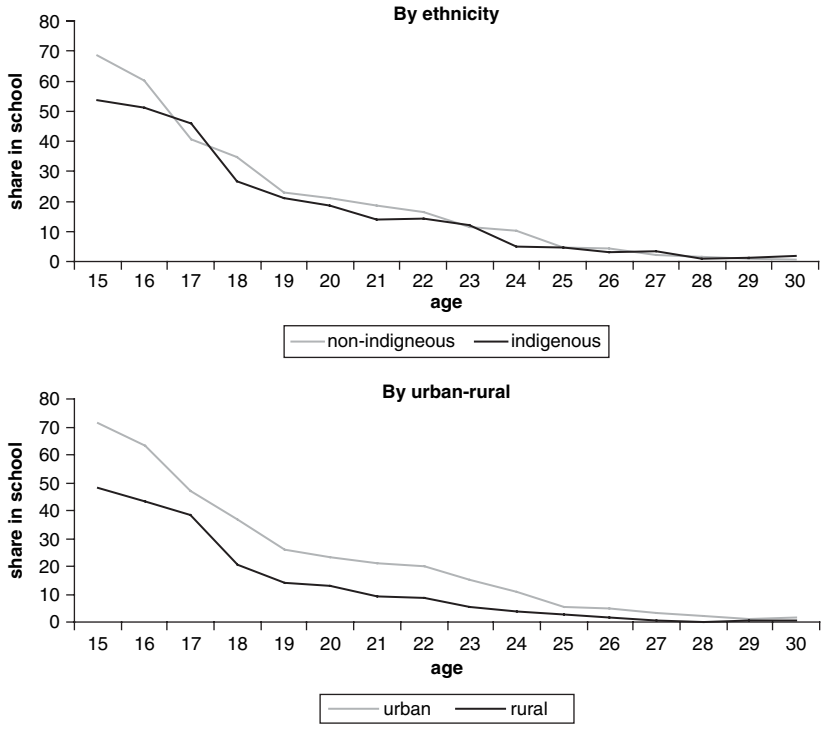
		By gender				*By poverty level*		
Country		*Begin*[a]	*End*[b]	*Duration*		*Begin*[a]	*End*[b]	*Duration*
Argentina	Male	17	24	7	Poor	n.a.	23	n.a.
	Female	17	26	9	Nonpoor	n.a.	23	n.a.
Bolivia	Male	<12	22	10+	Poor	n.a.	n.a.	n.a.
	Female	<12	26	14+	Nonpoor	n.a.	n.a.	n.a.
Brazil	Male	13.5	20.5	7	Poor	11.5	29.5	18
	Female	14.5	28.5	14	Nonpoor	17.5	23.5	6
Dominican	Male	14	20	6	Poor	n.a.	n.a.	n.a.
Republic	Female	15	>26	11+	Nonpoor	n.a.	n.a.	n.a.
Ecuador	Male	<12	22	10+	Poor	n.a.	n.a.	n.a.
	Female	<12	18	6+	Nonpoor	n.a.	n.a.	n.a.
Mexico	Male	13	19	6	Poor	15	22	7
	Female	14	26	12	Nonpoor	16.5	21	4
Peru	Male	13.5	19	5.5	Poor	10	19	9
	Female	13.5	23	9.5	Nonpoor	16	23	7

Source: Household and labor market surveys, various years.
Note: n.a. = not available.
a. First year at which less than 75 percent of the age group is in school and not working.
b. First year at which at least 50 percent of the age group is working and not in school.

Young people from poor, indigenous, or rural families start the transition at an earlier age. For example, 75 percent of young Peruvians from nonpoor families are no longer full-time students by the age of 16, while 75 percent of young Peruvians from poor families are no longer full-time students by the age of 10 (table 5.1). Similarly, young people who identify themselves as "indigenous"—a secondary proxy for risk as defined in chapter 4—leave school earlier than do nonindigenous young people (see figure 5.8). By 15 years of age, only 70 percent of nonindigenous Peruvians are studying, compared with 50 percent of their indigenous peers. The difference seems to be in the higher propensity of young indigenous students to study and work at the same time. While 30 percent of these young people are studying and working at the age of 15, only 15 percent of nonindigenous youth are doing so. In Brazil, on the other hand, Afro-Brazilians start the transition at the same age as white Brazilians (World Bank 2007b).

Urban young people continue as full-time students longer and become full-time workers later than their rural counterparts. While 70 percent of young urban Peruvians are full-time students, only 50 percent of rural young Peruvians are. Rural young people are twice as likely to combine work and school as are their urban counterparts—30 percent

Figure 5.8. Share of Young Peruvians at Each Age Who Are Full-Time Students



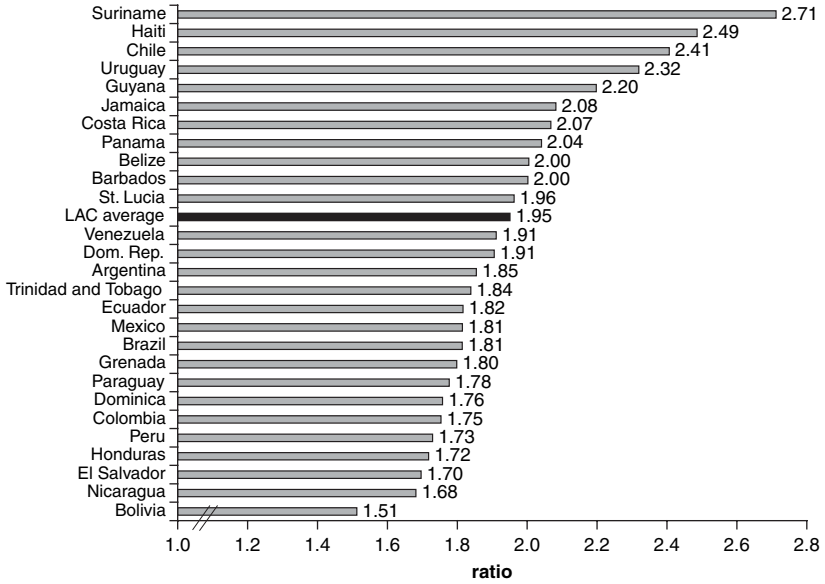
Source: Author's calculations based on data from the Peruvian National Household Survey (Encuesta Nacional de Hogares, ENAHO) 2001.

compared with 15 percent. Rural Brazilians begin the transition at the age of 10, while their urban counterparts start at the age of 14 (World Bank 2007b).

Unemployment Rates Are Higher among Youth, Particularly Young Women

Youth unemployment rates in LAC—defined as the proportion of young people searching for a job relative to the total number of youth who are either working or searching for employment—are 1.7 times higher than total unemployment rates.[9] One-third of the countries in the region have youth unemployment rates that are more than double those of the total unemployment rate. The gap is the largest in Suriname, with a youth unemployment rate 2.7 times the total unemployment rate, and the regional low is in Bolivia, where young people's unemployment rate is

Figure 5.9. Ratio of Youth to Total Unemployment Rates in Select LAC Countries
(*average for 1993–2003*)



Source: Authors' calculations based on data from World Bank 2006b.

1.5 times that of the overall labor force (see figure 5.9). Young women's unemployment rate is 1.4 times that of young men, largely due to the conflict between women's home and market duties. A job would have to offer very good wages and employment conditions for a woman to give up home duties to enter the labor force, so women tend to have to spend a longer time searching for jobs than men do. In the few countries for which we have data on youth unemployment by socioeconomic status, those from poorer families have a higher unemployment rate. For example, the unemployment rate of 15- to 18-year-old Brazilians and Mexicans from nonpoor families is about 5 percent, but those from poor families have a rate that is about twice as high. Both the level and the gap are even greater in Argentina, where the nonpoor have an unemployment rate of 14 percent, compared with 54 percent in poor families (Cunningham, forthcoming, a).

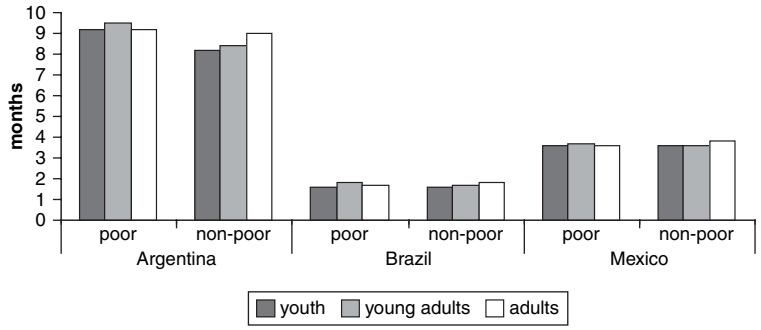
Youth Joblessness, Rather Than Unemployment, Is the Main Concern

The unemployment rate, however, is not the best indicator for capturing the extent to which young people have difficulty entering the labor force

for three reasons. First, when young people leave school, many more become inactive (not working and not looking for work) than unemployed (not working but searching for a job). For example, in Brazil, of the 14 percent of 15- to 18-year-olds from poor families who leave school and are still not working one month later, 1.6 percent are unemployed, but 12.4 percent are inactive.[10] Second, the definition of "unemployment" is subject to interpretation. A person is considered to be unemployed if he or she "actively searched" for a job in the past several months, which is a vague concept in itself. Because the distinction between being unemployed and being inactive is tenuous at best, it is the state of not working, rather than unemployment *per se*, that is of interest in gauging how well young people are doing. Third, the duration of young people's spells of unemployment is similar to that of adults' spells of unemployment in several countries, suggesting that young people move out of unemployment at the average rate (see figure 5.10). These three facts indicate that high youth unemployment rates are the result of many people in the youth cohort entering the labor force at once—when they all leave school—whereas fewer adults enter the labor force in any single period.

One in four young people in LAC are jobless, meaning that they are not working and not in school. The "jobless" category encompasses the unemployed and the inactive and thus does not differentiate between those who are actively looking for work (the unemployed) and those who are not (the inactive). In contrast to unemployment rates, jobless rates tend to be relatively similar across LAC, ranging from 23 to 34 percent of the youth population. LAC countries that have relatively low youth

Figure 5.10. Duration of Unemployment

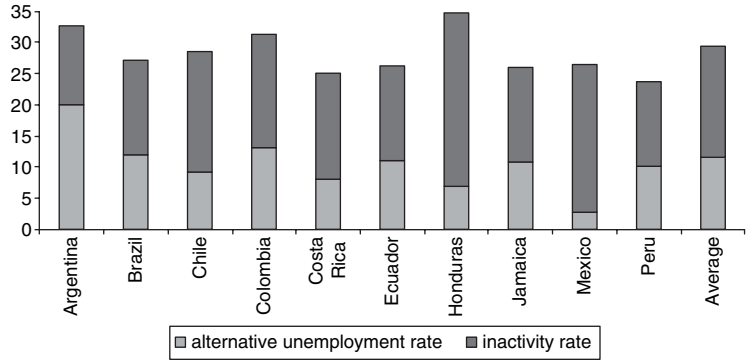


Source: Cunningham, forthcoming, a.

unemployment also have relatively higher inactivity rates, and those with high unemployment rates have lower inactivity rates.[11] For example, the unemployment rate is very low in Honduras, but the inactivity rate is quite high, leading to a jobless rate that is similar to those in the rest of the region. Conversely, the unemployment rate in Argentina is the highest in the region, but the inactivity rate is low, resulting in a jobless rate that is similar to that in Honduras. Thus, jobless rates across the LAC countries tend to vary much less than the unemployment or the inactivity rates (see figure 5.11). This suggests that at least some of the differences in the unemployment rates across countries may be due to differences in respondents' subjective definitions of inactivity.

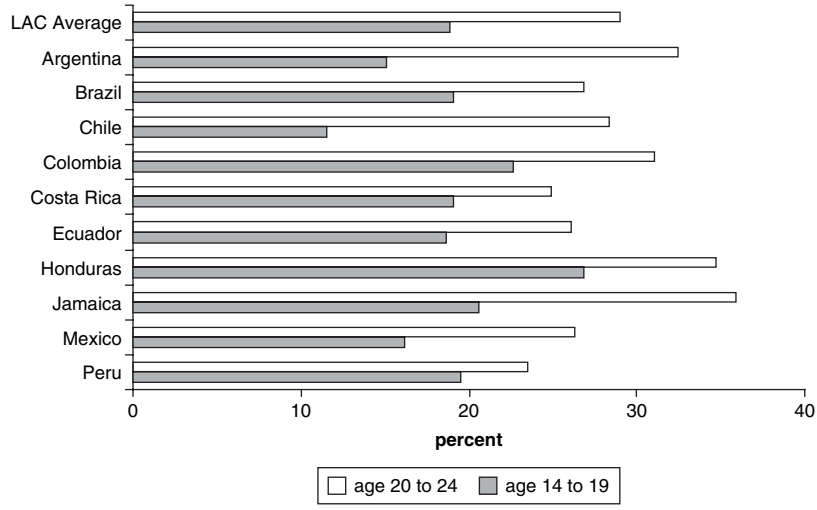
Jobless rates differ by age and gender. The jobless rate is significantly higher for those ages 20–24 years than for the 14–19 age group because a large share of young people between 14 and 19 years of age are still enrolled in school, whereas a large share of young people between 20 and 24 have already left school (see figure 5.12). The analysis across gender groups within countries shows that most inactive young people are women, particularly among those ages 20–24. Of the inactive youth in the 14–19 age group, about 30 percent are men and 70 percent are women, whereas among the 20–24 age group about 11 percent are men and 89 percent are women (García-Verdú et al., forthcoming).

Figure 5.11. Jobless Rates in LAC Disaggregated by Unemployment and Inactivity Rates for 19–24-Year-Olds



Source: Author's calculations using data from each country's household survey.
Note: The alternative unemployment rate is defined as the number of unemployed youth as a share of the number of youth in the 19–24-year-old age group. This is in contrast to the unemployment rate, which is defined as the number of unemployed youth as a share of the number of youth in the labor force. The reason one needs to redefine the unemployment rate this way is that the inactivity rate, defined as the number of youth who are unemployed or out of the labor force and not studying as a share of youth in the 19–24-year-old age group, cannot be added to the traditional unemployment rate.

Figure 5.12. Rates of Joblessness (Latest Year Available)



Source: Authors' calculations based on each country's household survey.
Note: Average is nonweighted average.

The Long Transition from School to Joblessness

Joblessness itself may not be the best indicator of being at risk because most young people leave this state fairly quickly (figure 5.10). Instead, the length of joblessness is a better indicator of being at risk. Those who have been jobless for a long time or have other difficulties integrating themselves into the labor market can be considered to be most at risk.

Six to 16 percent of young people in Argentina, Brazil, and Mexico were hard-core jobless, meaning that they have not worked since leaving school.[12] Nearly 13 percent of Brazilian students were not working within four months of leaving school (see table 5.2). The transition from school to work takes longer in Mexico than in Brazil, as 40 percent of the Mexican sample was still not employed three months after leaving school. However, by six months after that, all but 6 percent had a job. The rate of the transition in Argentina is even slower: six months after leaving school, half of Argentine youth were not working, and by 12 months later, 16 percent were still not working.[13]

The frequency of joblessness decreases with age. Over a one-month (Brazil), three-month (Mexico), and six-month (Argentina) period, urban 15- to 18-year-olds exited employment and became jobless, meaning that they were inactive (not working or looking for a job) or unemployed

Table 5.2. Share of Young Men Who Have Not Worked since Leaving School
(*by number of months since leaving school*)

Months out of school	*2*	*3*	*4*	*5*	*6*	*9*	*12*	*18*
Argentina					49.3%		26.5%	16.2%
Brazil	19.5%	15.1%	12.8%					
Mexico		40%			12.4%	6.61%		

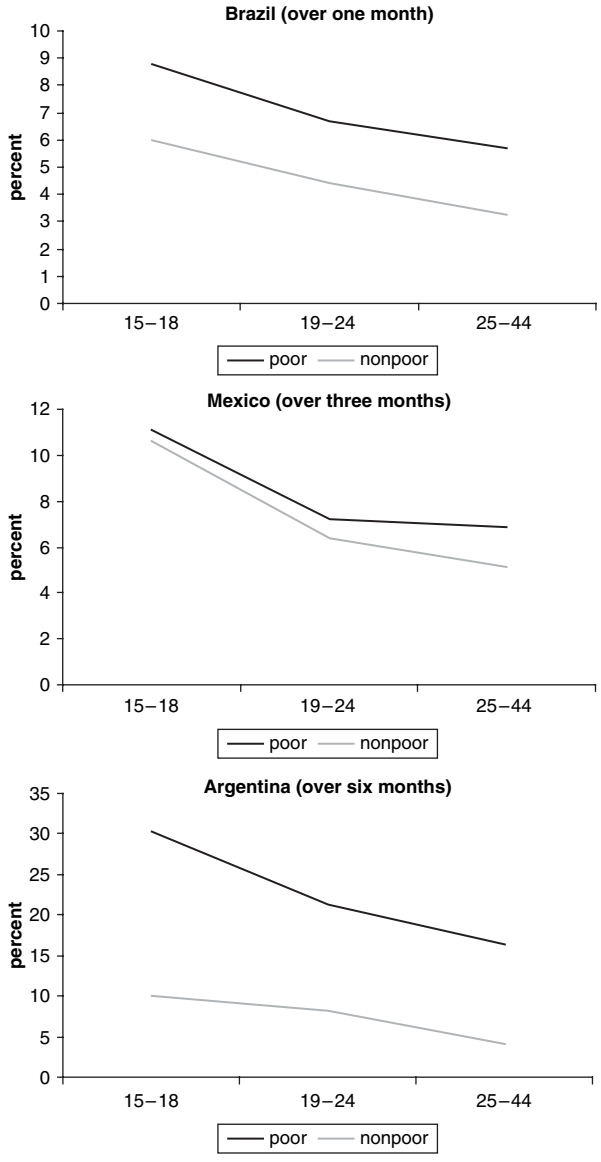
Sources: Argentina's *Encuesta de Hogares* 1995–2003; Mexico's *Encuesta Nacional de Empleo Urbano*, 1987–2004; Brazil's *Pesquisa Mensual de Emprego* 1995–2003.
Note: In Brazil, 8.9 percent of the sample left school during the month between the first and second observation; 16 percent of the Mexican sample left school during the three months between the first and second observation; 17 percent of the Argentine sample left school during the six months between the first and second observation. The percentages for the subsequent months are the share of those who left school who are not working by the time of the observation. The sample was observed monthly in Brazil for a total of four months (four observations), every trimester in Mexico for a total of one year (four observations), and every semester in Argentina for a total of two years (four observations).

(searching for work) and did not return to school—more than any other age group. This trend decreases with age in the three sample countries (see figure 5.13) to the extent that the oldest age group, those ages 25 to 44, had the lowest probability of becoming jobless. The frequency of joblessness is also higher among those from the poorest families, regardless of age group, which suggests that young people from poor families are the most at risk in terms of not integrating well into the labor market.

Informality Is a Stage in Early Work Life

Many young people start their work lives in unpaid and informal wage labor and graduate to formal wage employment over time. Unpaid work and informal wage employment are the most important sectors for young people from both poor and nonpoor families at the beginning of their working lives (see figure 5.14). Most young people find their first paid employment in the informal wage sector. This is particularly true among workers ages 15–18. Of this age group, 70 percent of new Argentine labor force entrants, 60 percent of new Brazilian labor force entrants, and half of new Mexican labor force entrants find work as employees in firms that do not pay their benefits, that is, in the informal sector (Cunningham, forthcoming, b). Tenure in this sector lasts less than a year in the three countries for which data were available (Argentina, Brazil, and Mexico) and is often interrupted by a return to school or by getting a job in the formal sector. By late adolescence, those from nonpoor families are leaving the informal sector and quickly entering the

Figure 5.13. Share of Each Age Group That Becomes Jobless



Source: Cunningham, forthcoming, a.

Figure 5.14. Share of Poor and Nonpoor Groups in Self-, Unpaid, Informal Salaried, and Formal Salaried Employment

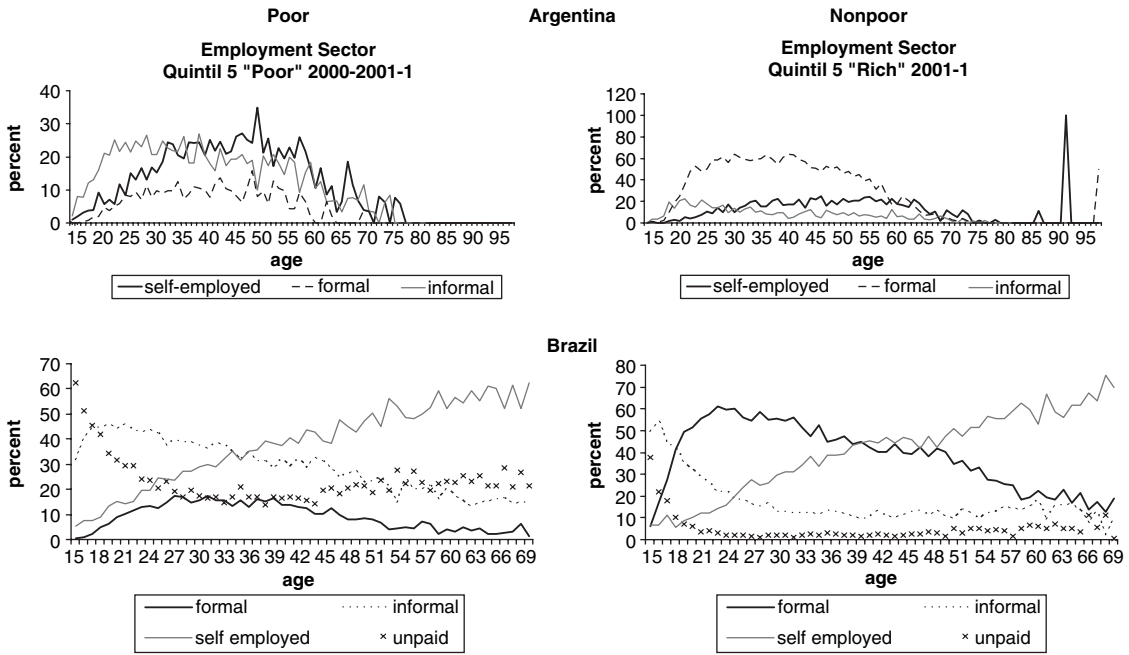


Figure 5.14. Share of Poor and Nonpoor Groups in Self-, Unpaid, Informal Salaried, and Formal Salaried Employment *(continued)*

Source: Cunningham, forthcoming, b.

formal wage sector. However, young people from poor families stay in informal wage employment for much longer and are much slower to enter formal sector employment, never reaching the levels of their non-poor colleagues.

Young informal wage workers want formal wage-paying jobs. Seventy-five to 80 percent of young Brazilians ages 15 to 24 who are informal wage workers would prefer to have a formal wage-paying job (see table 5.3). This contrasts with only 30 percent of 45- to 70-year-olds who are unhappy with their sector of employment. Among the 20 percent of young people who do not want to switch sectors, three-quarters say that they are content with their current jobs. Eight percent of young men, a higher share than any other age group, say that they prefer the informal sector because it gives them time for other activities, while women increasingly give this response as they age. About 6 percent of young people attribute their preference to the flexibility of the informal sector, in contrast to the commitment that more formal employment would require.

A number of different factors indicate that young people spend time searching for their "niche" in the labor market. For example, young people frequently switch sectors, accumulating experience and labor market connections along the way. Balán, Browning, and Jelin (1973) noted that

Table 5.3. Happiness with Informal Wage Employment in Brazil
(*percentages*)

	Male				*Female*			
	15–18	*19–24*	*25–44*	*45–70*	*15–18*	*19–24*	*25–44*	*45–70*
Prefers informal over formal wage employment	22.8	25	31.8	55.3	25.5	28.5	43.5	70.1
Reason for preferring informal wage employment								
Earns more in current job	3.1	7.6	10.6	2.4	1.7	3.0	2.6	0.8
Needs to care for the home	0.2	0.0	0.1	0.0	1.7	3.0	2.6	0.8
Needs time for other activities	8.5	5.1	3.5	4.4	4.7	9.5	25.7	24.3
Happy in current job	74.1	74.7	68.7	57.1	60.3	73.6	71.6	55.6
Does not want the commitment	6.6	8.3	10.8	16.6	6.7	7.7	7.1	13.7
Other	7.6	4.3	6.2	19.5	4.6	2.9	3.6	9.8

Source: Perry et al. 2007.

young Mexican workers spend this period of their lives "shopping around" and trying out various possible life choices. Other data indicate that youth express unhappiness with informal wage employment and tend to move away from this type of employment as they get older.

Alternatively, one could think of the informal wage sector as a type of apprenticeship. If schools do not prepare workers for the labor market, the informal sector may be a socially low-cost way to provide that practical training. In fact, Hemmer and Mannel (1989) found that in many countries, informal small enterprises train more apprentices and workers than the formal education system and the (mostly government) job-training schemes combined. Thus, the informal sector experience may be a type of technical schooling, with a lower (training) wage than they will get after they "graduate" to a formal-sector job. Another interpretation is that the informal paid sector may be the LAC version of the very high levels of unemployment found among young people in OECD countries (Jimeno and Rodriguez-Palenzuela 2003). A large pool of young people enters the market every year, and, as discussed above, they go into either wage employment (as in Mexico and Brazil) or unemployment (as in Argentina and the OECD). There is frequent movement between informal wage employment and unemployment, suggesting that these states may be more closely linked than might have been expected.

Self-Employment: Not a Path into the Labor Force

Self-employment, often one of policy makers' preferred solutions to the issue of youth joblessness, is in fact more commonly the occupational state of older workers. Among 15- to 18-year-olds, only 6 percent of Mexicans and 12 to 17 percent of Argentines select this occupational status. In contrast, nearly one-third of adults ages 25–44 become self-employed after a spell of not working (see figure 5.14). Evans and Jovanovic (1989) have argued that self-employment increases with age in the United States because of household budget constraints, but this may not necessarily be the case in LAC. In Argentina, young people from poor families are more likely to enter self-employment than those from less poor families, whereas the probabilities are equal among poor and nonpoor young Mexicans. This is not necessarily contrary to the finding of sociologists Balán, Browning, and Jelin (1973) and to various economists,[14] that human and physical capital accumulation may require several years, so workers in Mexico tend to follow a life-cycle model in which they get a wage-paying job; accumulate knowledge, capital, and contacts; and then quit to open their own informal businesses.

In fact, young people favor formal wage work over self-employment. While fewer than one-fourth of self-employed Brazilian adults would like to become formal sector employees, 70 percent of those ages 15–18 wish to do so, and one-half of those ages 19–24 state the same preference. Among those who prefer to be self-employed, 15- to 18-year-olds cite having the time flexibility to fit in other activities as a positive aspect of that occupational status, while nearly 70 percent of 15- to 24-year-olds who do not want to leave self-employment are happy in their work (see table 5.4).

In sum, the school-to-work transition is a long process, during which young people leave school, become jobless, and spend time moving between unemployment, inactivity, and informal employment until settling into formal sector employment and—with age—into self-employment. About one-quarter of young Latin Americans who leave school spend some time being jobless, but they quickly move out of joblessness into (mostly) informal sector jobs. Young people from poor families have much more difficulty in making the transition to formal salaried employment and many never do, while 80 percent of the nonpoor leave the informal sector by the age of 27. Finally, self-employment becomes more prominent beyond the youth years, highlighting the fact that it is not a standard first job in a young person's work life.

Table 5.4. Satisfaction with Self-Employment in Brazil
(*percentages*)

	Male				*Female*			
	15–18	*19–24*	*25–44*	*45–70*	*15–18*	*19–24*	*25–44*	*45–70*
Prefers self-employment over formal salaried employment	29.9	52.6	68.3	80.6	24.6	41.8	55.2	71.2
Reasons for preferring self-employment								
Earns more in current job	13.4	17.6	21	9.6	5.1	13.3	12.1	3.9
Needs to care for home	0	0	0.1	0.4	15.3	22.8	27.5	28.8
Needs time for other activities	7.5	3.2	2.5	3.2	6.8	7.9	6.6	6.8
Happy in current job	69.5	68.3	64	67.6	59.3	47.7	44.8	39
Does not want the commitment	8	9.8	10	10.6	8.5	7.6	6.9	9.8
Other	1.6	1.1	2.2	8.6	5.1	0.8	2.2	11.6

Source: Perry et al. 2007.

Risky Sexual Behavior

Engaging in unprotected sex at an early age (type II risk), becoming pregnant, and giving birth as a teenager (type III risk) incur costs for the young mother, the young father, and their child. Risky sexual behavior—defined as initiating one's sexual life at a young age, engaging in unprotected sexual activity, or forced sexual initiation—is associated with dropping out of school, adolescent pregnancy, and a high risk of contracting HIV/AIDS or other STIs. The literature from the United States points out that adolescent mothers have a higher probability than older mothers of raising their children in poverty because of their lower earning potential and more limited support from other sources, including the father of their infant. The children of adolescent mothers have been found to have more health and behavioral problems, lower cognitive development, and poorer school achievement than children of older mothers (Ahn 1994; Grogger and Bronars 1993; Hoffman, Foster, and Furstenberg 1993; Nord et al. 1992; Rangarajan, Kisker, and Maynard 1992). Box 5.1 describes the consequences of adolescent parenthood in the United States.

Box 5.1

Characteristics of Young Parents and Their Children in the United States

Consequences of adolescent motherhood:

- Seven out of 10 young mothers will drop out of high school.
- During the first 13 years of parenthood, adolescent mothers earn an average of about $5,600 annually, less than half the poverty level.
- Adolescent mothers spend nearly five times more of their young adult years as single parents than do women who have their first child at the age of 20 or 21.

Consequences of adolescent fatherhood:

- Young fathers finish an average of 11.3 years of school by the age of 27, compared with nearly 13 years by their counterparts who delay becoming fathers until the age of 21.
- By the age of 27, adolescent fathers earn, on average, $4,732 less annually than the comparison group of men who delayed becoming fathers until the age of 20 or 21.

(*continued*)

Consequences for the children of adolescent mothers:

- The children of adolescents are more likely to be born prematurely. They are 50 percent more likely to be low-birthweight babies (less than 5.5 pounds), which increases the probability of a variety of adverse conditions such as infant death, blindness, deafness, chronic respiratory problems, mental retardation, mental illness, and cerebral palsy. It also doubles the chances that a child will later be diagnosed as having dyslexia, hyperactivity, or another disability.
- The children of adolescent mothers have poorer health than the children of women who were age 20 or 21 when their first child was born.
- Children of adolescent mothers are more likely to be physically abused, abandoned, and neglected than the children of women who were age 20 or 21 when their first child was born.
- The children of adolescent mothers tend to have lower scores in math and reading (by 4 percentage points on school tests) versus a comparison group and a greater likelihood of delayed entry to school and of repeating grades.
- The children of adolescent mothers are two to three times more likely than the children of their older childbearing counterparts to run away from home between the ages of 12 and 16.

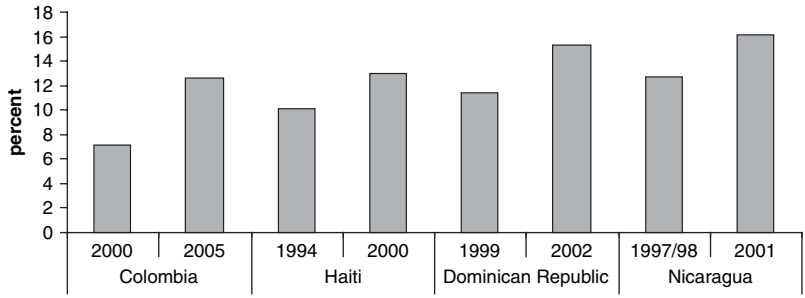
Source: Maynard 1997.

Risky Sexual Behavior in LAC Is Starting at an Earlier Age Than in Previous Generations

Contrary to global trends (National Research Council and Institute of Medicine 2005), youth in many LAC countries are initiating sexual activity at a younger age. Figure 5.15 shows that the percentage of women ages 25 to 29 who had had sexual intercourse by the age of 15 has increased by 25 to 100 percent in the four countries for which such evidence exists: Colombia, the Dominican Republic, Haiti, and Nicaragua. For example, 6.5 percent of Colombian women report having had intercourse before the age of 15 in the year 2000, but the share increased to 12.3 percent by 2005.

Early sexual initiation is of particular concern in the Caribbean. Of the 34 percent of young people (between the ages of 10 and 18) in the English-speaking Caribbean who reported being sexually active, 82 percent of the males and 52 percent of the females reported having initiated sexual activity at or before the age of 13 (Ohene, Ireland, and Blum 2005). A recent school-based survey in Jamaica indicated that 12.8 percent of

Figure 5.15. Percentage of Females (Ages 25–29) Who Had Sex by the Age of 15



Source: MEASURE DHS STATcompiler (USAID), http://www.measuredhs.com

adolescents ages 10 to 15 reported that they had had sexual intercourse, and boys were four times more likely than girls to have had sexual intercourse (MEASURE Program 2007a). Among the Jamaican adolescents ages 10 to 15 who had ever had sex, 44 percent had had one partner and 17 percent had had six or more partners.

Young people report having risky sex. Of all respondents reporting sexual activity in the last 12 months, more than 95 percent of 15- to 19-year-old males and more than 50 percent of females reported having had sex with a nonmarital, noncohabiting partner (see table 5.5), and few used a condom. Particularly disturbing is the fact that adolescents ages 15 to 19 are less likely to use a condom than 20- to 24-year-olds.

Early sexual initiation is involuntary for many young people (Jejeebhoy and Bott 2003). In a recent population-based survey in the Caribbean, nearly 50 percent of sexually active young women (defined as between the ages of 10 and 18 years) reported that their first sexual experience was "forced" or "somewhat forced" (UN Millennium Project 2005). In the recent school-based survey of 10- to 15-year-olds in Jamaica mentioned above, 9.2 percent of boys and 24.4 percent of girls stated that their first sexual encounter was forced. An additional 9 percent of boys and 11 percent of girls said they did not want to engage in sexual activity, but they did not express this preference to their partner (MEASURE Program 2007a). In Peru, between 40 and 80 percent of young women reported that their first sexual experience was forced (Blum and Sudhinaraset 2006; Caceres, Vanoos, and Hudes 2000). Sexual coercion may be more common in settings where traditional gender roles of masculinity and dominance are more rigid (Barker 2006).

Table 5.5. Percentage of Sexually Active Young People Who Report Engaging in Risky Sex and Using Condoms the Last Time They Had High-Risk Sex

		Had sex with a nonmarital, noncohabitating partner in the past year				*Used a condom the last time they had high-risk sex*			
		Ages 15–19		*Ages 20–24*		*Ages 15–19*		*Ages 20–24*	
Country	*Year*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*
Brazil	1996	95	54	78	33	60	34	59	31
Colombia	2000	—	59	—	43	—	32	—	28
Dominican Republic	2002	95	34	76	26	51	29	53	30
Haiti	2000	99	72	88	53	33	20	27	18
Peru	2000	—	43	—	24	—	15	—	22

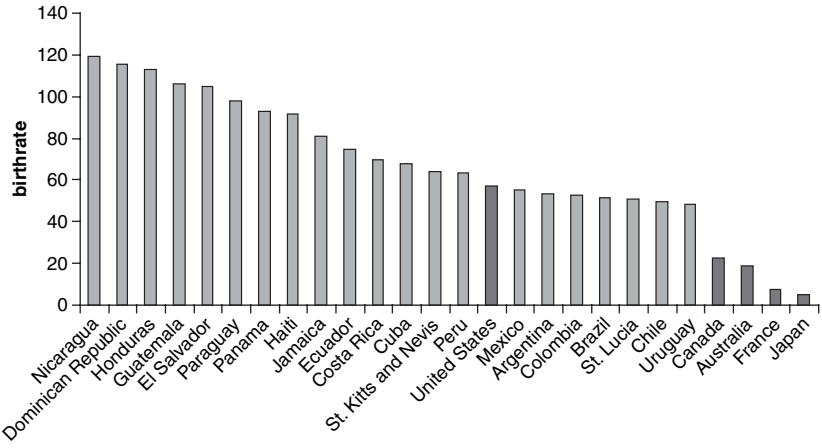
Source: UNAIDS 2006.
Note: Self-reported behavioral data are becoming increasingly suspect. Public health experts are moving toward data with biological confirmation. Thus, percentages in this table should not be taken as definitive.

The Consequences of Risky Sex Are Greater Today Than in the Past

Although more methods are available to protect young people against the consequences of risky sex today than in the past, other social and biological forces are increasing the riskiness of early, unprotected, or forced sex. With regard to social factors, the delay of marriage is related to the increase in the number of sexual partners (that is, since the assumed monogamy of marriage starts later while sexual initiation is at the same or earlier ages than in the past), the spread of STIs, and the increase in single motherhood. Economic factors, including increased migration, are thought to be a factor behind the increase in the number of sex partners. On the biological front, menarche is starting earlier than in previous generations, which may be one reason for the increase in young girls becoming pregnant. And the emergence of new sexually transmitted diseases, namely HIV, has increased the costs of risky sex.

Teen fertility rates in LAC are much higher than those in developed countries. Figure 5.16 shows that the fertility rates of girls ages 15 to 19 are higher in LAC than in all of the OECD countries, with the exception of the United States.[15] Nicaragua holds the regional high, with 120 births per 100,000 girls ages 15 to 19. Even those LAC countries with the lowest adolescent fertility rates—Brazil, Chile, St. Lucia, and Uruguay—with 48 births per 100,000 girls ages 15 to 19, still have rates double those of most OECD countries.

Figure 5.16. Teen Fertility Rates per 100,000 Girls Ages 15–19 in LAC and Select Industrial Countries, 2000

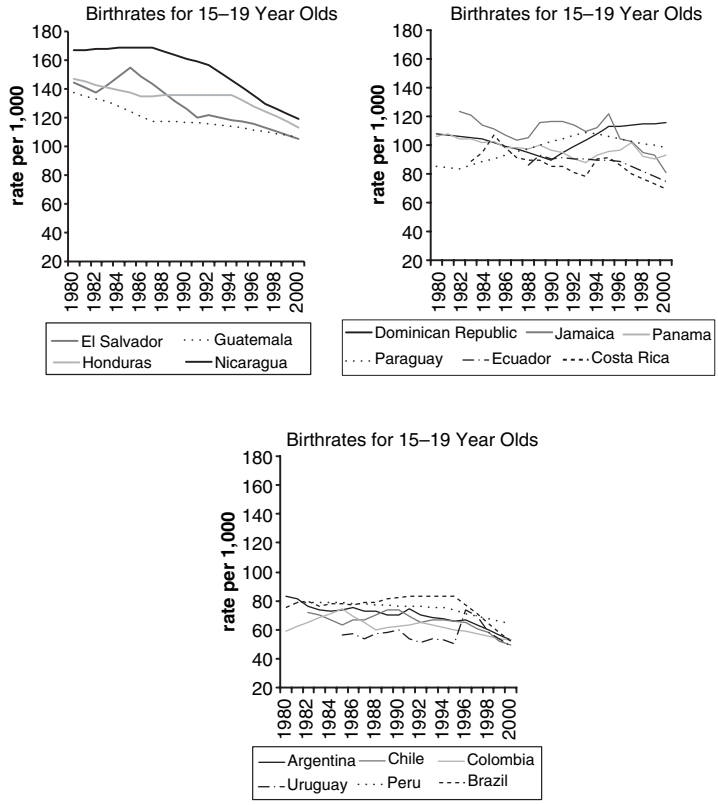


Source: U.S. Bureau of the Census, International Database.

The incidence of teenage motherhood is decreasing in most of the region. In the Central American countries, fertility rates decreased by more than 30 percent between 1980 and 2000 but remain very high, with more than 100 births per 100,000 women ages 15 to 19. A second group of countries, including the Dominican Republic, Ecuador, Jamaica, Panama, and Paraguay, had decreasing teen fertility rates in the 1980s, but that trend was reversed in the 1990s. A third group of countries, including Argentina, Brazil, Chile, Colombia, Peru, and Uruguay, have much lower teen birthrates than the regional average, and projections suggest that these rates will continue to decline to 50 births per 100,000 girls ages 15 to 19 (see figure 5.17). However, this is not entirely a success because these lower rates are still twice as high as in Australia and Canada and 10 times higher than in France, Japan, or Spain.

Although there are lower teen birth rates than there were 20 years ago, there are more teen mothers today because of the rapid increase in the teenage population. As shown in chapter 2, between 1950 and 2005, the number of young girls doubled; during the decade from 2010 to 2020 alone, the number of teen women is expected to increase by almost half a million.[16] Thus, even if teen birth rates remain the same or fall, the number of children born to teen mothers will increase.

Figure 5.17. Birthrates for Teenagers in LAC, 1980–2000



Source: U.S. Census Bureau, International Database (IDB).

Pregnancy rates are three to five times higher among poor adolescents than among nonpoor adolescents. Teens with no education are five times as likely to become pregnant or to have given birth as girls who have secondary-level education or higher. In Bolivia, Colombia, El Salvador, and Guatemala, girls who have only a primary education are three times more likely to become pregnant or have a child compared with girls who have secondary or higher education. Rural areas, where the incidence of poverty is higher than the national average, also exhibit a higher incidence of teen pregnancy and births. Adolescent women living in rural areas of Bolivia, Guatemala, and Peru are almost two times more likely to become pregnant or to be a mother than adolescents in urban areas (see table 5.6).

Table 5.6. Percentage of Teenage Girls Who Are Mothers or Pregnant, by Highest Level of Education Attained and by Area of Residence

	Area of residence		*Highest level of education completed*			
	Urban	*Rural*	*No education*	*Primary*	*Secondary+*	*Total*
Bolivia 2003	10	18	36	21	8	13
Brazil 1996	13	20	51	24	11	14
Colombia 2005	15	22	37	36	13	16
Dominican Republic 2002	17	23	56	28	11	19
Ecuador 1987	12	17	28	24	6	14
El Salvador 1985	18	28	38	23	7	22
Guatemala 1998/99	13	20	32	21	7	17
Haiti 2000	11	16	41	14	7	14
Mexico 1987	12	18	44	20	9	14
Nicaragua 2001	17	26	40	27	13	21
Paraguay 1990	11	18	34	21	5	14
Peru 2000	7	19	37	23	7	11
Trinidad and Tobago 1987	13	9	100	21	9	11

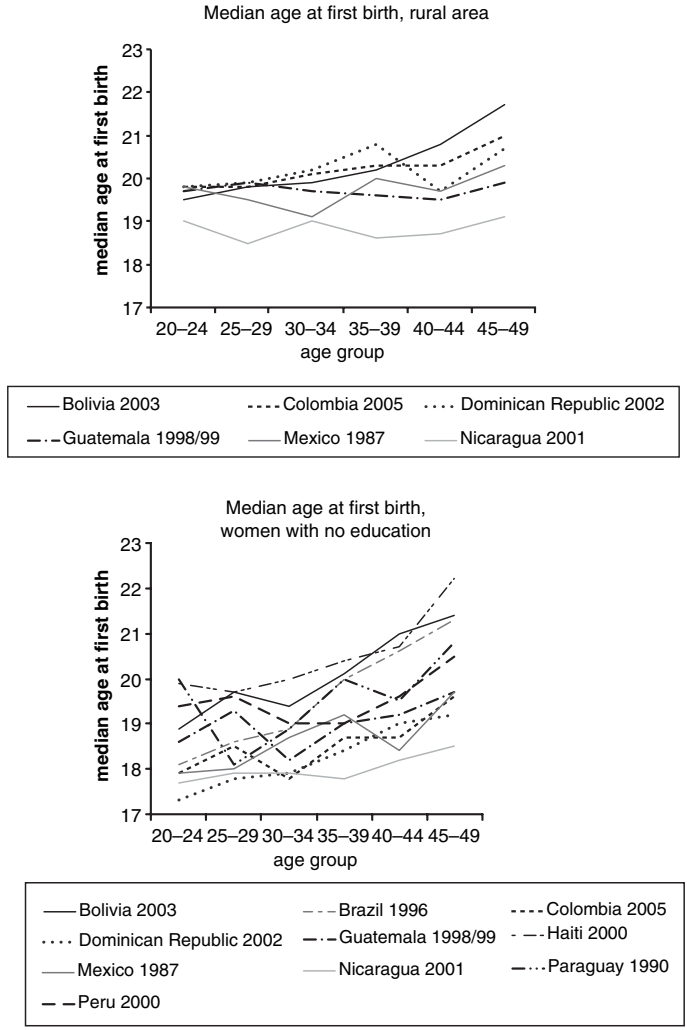
Source: MEASURE DHS STAT compiler (USAID), http://www.measuredhs.com.

Women are giving birth at younger ages than in the past, particularly in Bolivia, Colombia, and the Dominican Republic. This trend is driven by a decrease in the median age of first birth among uneducated young people in rural areas, that is, by young women with a higher probability of being poor and raising their children in poverty. Dominican and Bolivian women who were ages 20 to 24 years old in 2002 and had no education had their first child two years earlier than similar women who were ages 45 to 49 in 2002 (see figure 5.18). And in Colombia, women who were ages 20 to 24 years old in 2005 and were living in rural areas or had no education had their first child 1.5 years earlier than similar women who were ages 45 to 49 in 2005.

Having children at an early age involves a high health risk for the mothers. Maternal mortality remains one of the leading causes of death among adolescents in the region. In Argentina and Chile, where there are strict abortion laws, one-third of all maternal deaths are a direct result of complications of unsafe abortions (Bernstein 2000). In Latin America, it is estimated that 2.7 to 7.4 million pregnancies end annually in an abortion (Paxman et al. 1993).

STIs are an increasing problem among adolescents, with 15 percent of adolescents between the ages of 15 and 19 estimated to have acquired

Figure 5.18. Median Age at Time of First Birth among Women, by Rural Area and Education Level



Source: MEASURE Program 2007a.

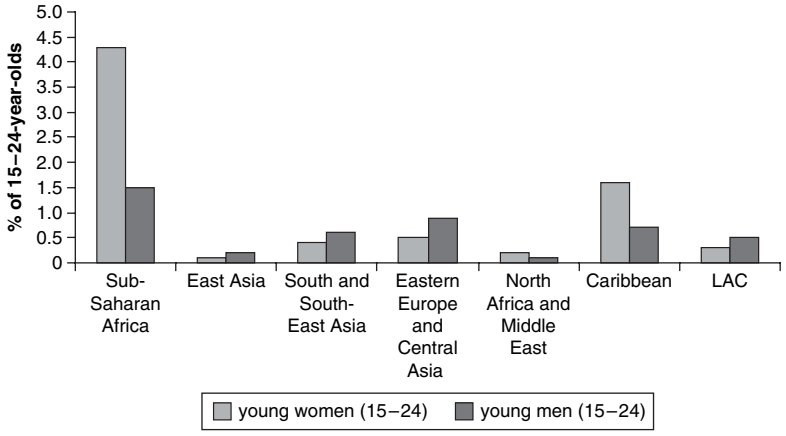
an STI at some point (Schutt-Aine and Maddaleno 2003). An estimated 1.6 million people in Latin America and 0.3 million in the Caribbean had the HIV infection as of 2005. The region's biggest epidemics are in the countries with the largest populations; however, despite Brazil having one-third of all HIV cases in the region, the highest prevalence of

HIV is in the smaller countries of Belize and Honduras and in the Caribbean (UNAIDS 2006).

The Caribbean is second only to Sub-Saharan Africa in terms of HIV prevalence among young people ages 15 to 24 (see figure 5.19).[17] The Caribbean's epidemics vary considerably in extent and intensity from country to country, with Haiti being home to more people with HIV than any other country in the Caribbean. Infections are concentrated in high-risk groups, including sexually active adolescents, injection drug users, and commercial sex workers and their customers. The AIDS epidemic is having a disproportionate impact on young women: in Trinidad and Tobago, females in their late teens (15 to 19 years old) are six times more likely to be HIV infected than males of the same ages, while in Jamaica young women are 2.5 times more likely than young men to be infected.

In sum, the prevalence of risky sexual behavior in LAC is very high compared with the prevalence in the OECD countries. Many young people are initiating their sexual activity at a younger age and are engaging in riskier sex than in the past, whether as a result of poor choices (for example, failing to use contraception) or forced intercourse. These patterns contribute to the increasing number of STIs, including HIV/AIDS, in some countries in the region. A smaller percentage of adolescent girls are having children than in past generations, but there are a larger number of teenage mothers because the teenage population is much bigger than in the past. This has implications for the young mother and father, who

Figure 5.19. HIV Prevalence among Youth



Source: UNAIDS 2006.

are at risk of engaging in other negative kinds of behavior, as discussed in chapter 4, as well as for their children.

Crime and Violence

Deaths and injuries from youth violence constitute a major social, economic, and public health problem across the LAC region. Homicides and nonfatal assaults contribute greatly to the global burden of premature death, injury, and disability. Young people are overrepresented in the ranks of both victims and perpetrators, and this pattern has become starker over time as rates of overall crime and violence have increased. Youth violence deeply harms not only its victims, but also their families, friends, and communities—and it harms the violent young person as well.

Youth Are the Victims of Crime and Violence in LAC

The LAC region has the world's highest homicide rate of men between the ages of 15 and 29 (69 per 100,000), more than three times greater than the global average in the 1990s. During this period, with 19.3 homicides per 100,000 people (including all victims), the homicide rate for the LAC region was more than double the world average of 8.8. The gap widens considerably in the case of young people. The homicide rates for young men range from 6.7 per 100,000 young men in Chile (compared with 5.4 per 100,000 males of all ages) to 212.5 per 100,000 young men in Colombia (compared with to 116.8 per 100,000 men of any age) (see table 5.7). In 2002, youth homicides represented 38.7 percent of all homicides in Brazil (World Bank 2007b), with some states having rates as high as 40 percent, even though young people constituted only 19 percent of the total population. Young women's homicide rates are one-tenth those of young men, but they still have higher homicide rates than females of all ages.

Death by homicide is much more common among Afro-Brazilians, who have a higher incidence of poverty, than white victims in Brazil. Approximately 102 deaths per 100,000 young Afro-Brazilians are due to homicide, compared with 39.2 deaths per 100,000 among young white Brazilians. The difference by race is much larger among young people than among adults (World Bank 2007b).

Deaths by homicide have increased over time among young people. For example, in the Dominican Republic, 30 of every 100,000 18-year-old Dominicans were victims of homicide in the year 2000. By 2005, this had increased to 73 of every 100,000 18-year-old Dominicans. The trend

Table 5.7. Homicide Rates by Gender and Age Group, Select Countries
(*per 100,000 inhabitants of that age and gender group*)

Country	*Year*	*Total*	*All ages males*	*All ages female*	*Males ages 15–29*	*Females ages 15–29*
Bahamas	1995–1997	14.9	26.1	—	48.4	—
Brazil	1995[a]	16.7	23.0	4.1	81.2	6.5
Chile	1994	3.0	5.4	0.8	6.7	—
Colombia	1995	61.6	116.8	9.0	212.5	15.0
Cuba	1997	6.2	9.6	2.7	18.4	5.7
Dominican Republic	2002[a]	10.2	19.7	2.1	35.3	3.2
El Salvador	1993	55.6	108.4	8.4	133.1	8.8
Guyana	1994–1996	6.6	11.8	—	—	—
Jamaica	2004[a]	55.7	102.1	10.5	188.0	14.8
Trinidad and Tobago	1994	12.1	17.1	6.6	21.6	—
LAC average	Various years	19.3	34.7	4.0	68.6	6.4
United States	1998	6.9	10.7	3.1	23.6	4.6
Canada	1997	1.4	1.9	1.0	3.2	1.1
World	Various years	8.8	13.6	4.0	19.4	4.4

Source: WHO 2002.
Note: a. Based on data obtained from WHO in August 2006.
— indicates that the sample size is too small to estimate the rate.

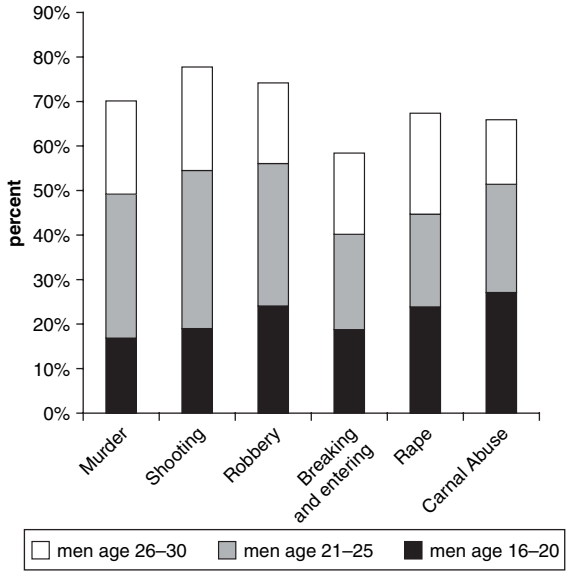
can be observed across all age groups, starting as young as age 12 (World Bank 2006j).

Youth Are the Perpetrators of Crime and Violence in LAC

Perpetrators of violent crimes are mostly young men between the ages of 16 and 25. Figure 5.20 shows that, among those arrested in 2004 in Jamaica for murder, shooting, robbery, breaking and entering, rape, and carnal abuse, more than half in each category were men ages 16 to 30, and that the bulk of major crimes were committed by men in the narrower age range of 16 to 25 (World Bank 2007a). However, arrest records give only a partial picture of youth violence. Evidence from the United States indicates that, for every youth arrested in any given year in the late 1990s, at least 10 were engaged in some form of violent behavior that could have seriously injured or killed another person (U.S. Surgeon General 2001).

The proportion of violent crimes committed by young people, and especially juveniles, was stable or increased between 1985 and 1994 across the LAC region, though trends differed significantly by country. In some countries, such as Chile and Mexico, rates in the period

Figure 5.20. Distribution of People Arrested for Murder and Major Crimes by Age Group, Jamaica, 2004



Source: World Bank 2007a.

remained stable: Chile's homicide rate was 3 per 100,000 young people, while in Mexico, where guns accounted for some 50 percent of all youth homicides, the rate was near 15 per 100,000. In other countries, youth homicide rates have been increasing. Colombian youth homicides increased by 159 percent, from 36.7 to 95 per 100,000, with 80 percent of the cases at the end of this period involving guns. In Venezuela, youth homicide rates increased by 132 percent, from 10.4 to 24.1 per 100,000 (WHO 2002). Although the overall mortality rate in Brazil decreased from 633 for every 100,000 Brazilians in 1980 to 561 in 2002, the youth mortality rate increased from 128 to 137 per 100,000 during the same period. The total number of youth homicides in Brazil increased by 88.6 percent between 1993 and 2002, while the total homicide rate increased by 62.3 percent (Waiselfisz 2004).

Violence is being committed at younger ages than in the past. A recent study using data from a nationally representative school-based survey of Jamaican children ages 10 to 15 confirms the presence of violence in the lives of the very young. Approximately 10 percent of the sample has been in a fight with a weapon, and 5 out of every 10 adolescents

had seen a dead body other than at a funeral, the cause of death being most often "shot or killed" (World Bank 2007a).

New Forms of Violence Characterize This Generation, Including School and Gang Violence

School-based violence is widespread in LAC. School violence encompasses all incidents in which any member of the school community is subject to abuse; threatening, intimidating, or humiliating behavior; or physical assault from a student, teacher, or other member of staff. Violence among students is the most common type, followed by violence by students directed at teachers and violence by parents toward teachers. For example, the Inter-American Development Bank (IADB 2004) reported the following:

- In Brazil, 84 percent of students in 143 schools from six state capitals considered their school violent, and 70 percent reported being victims of violence in school.
- In Bogota, Colombia, almost 30 percent of males and 17 percent of females have been in at least one fight in school.
- In Managua, Nicaragua, 37 percent of secondary school students have suffered from bullying and physical aggression within their schools.
- In San Salvador, El Salvador, around 15 percent of middle and secondary school students are involved in at least one school fight in any given month, and almost 20 percent carry bats or sticks to school for self-defense.
- In Kingston, Jamaica, 90 percent of students are worried about school violence. Twenty-one percent of the students had attacked teachers or staff, and 22 percent had suffered violence from other students.

Gang and drug-related violence has also increased in recent years, with young people as the most visible culprits of this type of crime and violence. Since the beginning of the 1990s, the nature of youth crime and violence has changed significantly in much of LAC, with youth gangs (otherwise known as *pandillas*, *maras*, *bandas*, *galeras*, *quadrilhas*, *barras*, *chapulines*, or *crews*) being among the most visible protagonists of this new violence. Youth gang members are responsible for three to five times the amount of violence and crime as nongang, at-risk youth (Huff 1998; IADB 2004). Estimates indicate that there are some 25,000 to 125,000 active gang members in El Salvador, Guatemala, and Honduras. Although gang violence is rooted in the specific realities of the countries

in the region, it is also linked to the growing global phenomenon of youth gangs (see box 5.2). Migration and deportation of gang members from the United States and other OECD countries have created a new transnational dimension to the problem (see box 5.3) and seem to be a factor in the transformation of youth gangs into more violent social entities (Pinheiro 2007).

Younger gang members are responsible for a disproportionately large share of offenses (World Bank 2006a). The formal association with a gang is powerful: gang members wield more influence over the violent behavior of their peers than violent nongang members. What is more, young gang members tend to commit crimes that are more serious and violent while they are gang members than after they leave the gang (UN Office on Drugs and Crime [UNODC] and World Bank 2007).

Box 5.2

Pandillas in Nicaragua

Almost half of all crimes in Nicaragua are attributable to youth gangs (*pandillas*). Each *pandilla* has 10 to 120 *pandilleros* ranging in ages from 7 to 22 years. The members are divided into age groups, each of which specializes in different violent activities. The youngest group (7 to 12) is a learning group, the middle group (13 to 17) is involved in gang warfare and petty delinquency, and members of the oldest group tend to be involved mostly in harder criminal activities.

Members tend to originate from the same lower-class neighborhood. *Pandillas* tend to have a well-defined primary territory that corresponds geographically to their neighborhood of origin. Generally, a *pandilla* does not harm or victimize its local neighborhood population. A *pandilla* often acts as an informal vigilante group confronting and attacking strangers.

The *pandilla* is a structuring institution for its members. Most *pandillas* have an identifiable leader who is normally the individual considered to have the most violent and dangerous reputation. The *pandilla* is a collective group that is guided by definite referential frameworks, linked to considerations of territoriality, identity, and local values, but it is grounded in violence. Although much of *pandilla* life revolves around violent activities, the *pandillas* are also a forum for socialization and the creation of strong social networks that persist beyond the gang.

Source: Rodgers 1999.

Box 5.3

When You Are a *Marero*

The Central American *maras* are formed mostly by young people between 16 and 25 years old. They establish and enforce codes of loyalty and conduct. The majority of *mara* members display external symbols such as tattoos, exhibit specific body language, and wear distinctive clothing, thereby delineating clear territories of control and rivalry among different gangs. The majority of *mareros* are involved in petty crime around the communities that they dominate. They also have severe conflicts with their gang rivals. In many cases, *mara* members are involved in armed violence.

Central America's conflicts during the 1980s produced a mass migration from the region, mainly to the United States. The subsequent deportation of large groups of people back to Central America appears to have created a generation of young people who do not have clear ties to either North America (where most of them lived in marginalized areas and were sometimes the victims of discrimination) or their communities in El Salvador or Honduras. One result of these upheavals was the dismantling of local webs of family and community life. In this context, the *maras* in a certain way represent a reconstruction of those elements that were lost and cannot be recovered.

The majority of gang members come from the poorest sectors of the population and have no access to proper education, having abandoned or been expelled from schools. Many *maras* have no expectations of finding any sort of employment. The Public Opinion Institute of Central American University in El Salvador conducted a survey of 1,025 gang members in the San Salvador metropolitan area and found that 75 percent were unemployed. Among those who were employed, only half held stable jobs. And only 33 percent of those surveyed had finished high school. About 66 percent had dropped out of school.

Source: Pinheiro 2007.

Across LAC, the growth in gang membership has coincided with easy access to small arms. In a number of countries, past conflicts have facilitated the spread of small arms, identified by the World Health Organization as a key factor leading to escalation of lethal violence in the region.[18] For example, in Brazil, homicides among young people have increased by 77 percent in a decade, mainly due to the spread of small arms (Pinheiro 2007).

Unfortunately, young people may not see a way out of the situation. As explained by a young person living in a poor neighborhood in Rio de Janeiro, "The police are totally corrupt. The traffickers are the ones who provide security to the community. . . . If the police arrive in the community, I 'turn in' the traffickers so that I don't get picked up by police. I want to live in a place that does not have this kind of conflict" (Belisário et al. 2004, p. 12).

Substance Use

Smoking, illicit drugs, and heavy alcohol use during youth can deplete the economy of productive human capital. Tobacco use is considered by WHO to be the second major preventable cause of death in the world, responsible for the death of 1 in 10 adults worldwide (about 5 million deaths each year). If current smoking patterns continue, it will cause some 10 million deaths each year by 2020 (WHO 2008). Harmful alcohol use is associated with lost productivity, traumatic injury, early death, crime and violence, and neglect of family responsibilities (Cook and Moore 2001). At the same time, the considerable abuse of drugs among socially integrated young people is attributed in part to the fact that a significant portion of the youth population is exposed to a culture that appears to tolerate the use of drugs.

Substance Use in LAC Is Not Particularly High, but Abusive Behavior Is Increasing

LAC adolescents drink far more alcohol than adults would like, though they consume less alcohol than adolescents in the United Kingdom or Sweden. Table 5.8 shows the rate of heavy episodic drinking among teenagers and young adults in select countries. Alcohol consumption among 15- to 19-year-old Europeans in the sample is equal to, or as much as double, the rates among 18- to 24-year-old LAC youths. Although the amount of drinking by LAC young people is not extreme in relative terms, LAC societies may have fewer resources to deal with the consequences.

The data on alcohol use in Brazil are fairly good and shed some light on the patterns of alcohol use. It is the most widely used nonmedical drug: 48 percent of Brazilians ages 12 to 17 experimented with alcohol in 2001, and older young people drink at rates similar to adults. Fortunately, only 0.1 percent of 12- to 17-year-olds claim to be addicted to alcohol, but the addiction rate increases with age (World Bank

Table 5.8. Heavy Episodic Drinkers among the Youth Population

	Age group 15–19			*Age group 18–24*		
	Total (%)	*Male (%)*	*Female (%)*	*Total (%)*	*Male (%)*	*Female (%)*
Brazil[a]	—	—	—	15	26	5
Colombia[b]	8	15	4	8	15	4
Dominican Republic[a]	—	—	—	12	18	7
Ecuador[a]	—	—	—	5	11	1
Guatemala[a]	—	—	—	2	5	0
Mexico[ab]	3	1	2	3	6	1
Paraguay[a]	—	—	—	16	29	4
United States	11	11	10	—	—	—
United Kingdom[c]	30	33	27	—	—	—
Sweden[c]	17	22	13	—	—	—
Turkey[a]	1	1	1	1	2	0

Source: WHO 2004a.

Note: The primary source of data for such an international comparison is a series of surveys conducted by WHO known as the Global School-Based Student Health Survey (GSHS). Care has to be taken when interpreting the data as different age groups and definitions of heavy episodic drinking are used in the various studies.

a. At least once a week consumption of five or more standard drinks in one sitting.

b. At least once a week consumption of six or more drinks in one sitting.

c. Consumption of five or more drinks in a row three times or more in the last 30 days.

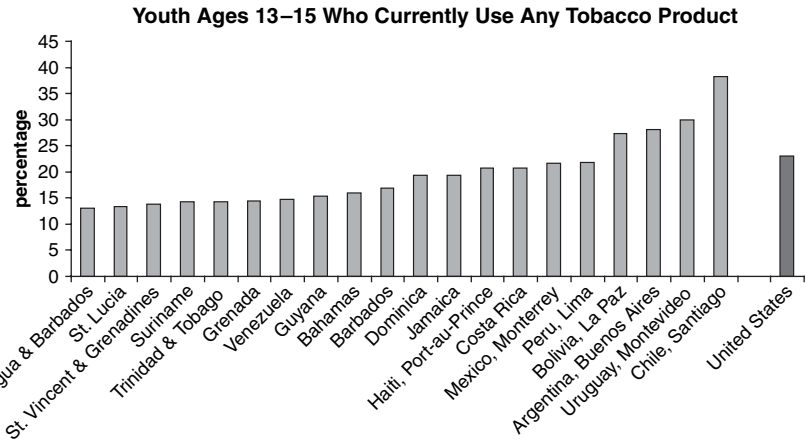
— indicates that the data are not available.

2007b). Males have higher alcohol consumption rates than females, both in terms of any drinking at all (47.4 percent for males compared with 40.6 percent for females) and frequent consumption (13.5 percent for males and 6.7 percent for females). The frequency of alcohol consumption increases with age. In the 10–12 age group, 30 percent drink alcohol on a somewhat frequent basis (at social occasions or parties); in the 13–15 and 16–18 age groups, the frequency of consumption rates are 52.6 percent and 66.4 percent, respectively, reaching 70 percent among those who are 19 years old or older (World Bank 2007b).

Unfortunately, young people in LAC are increasingly drinking alcohol simply to get drunk. Increased binge drinking and intoxication in young people—the pattern of consumption associated with Northern Europe—is now reported in countries such as Brazil and Paraguay (WHO 2004a).

Approximately 15 to 35 percent of 13- to 15-year-olds in LAC smoke or use other tobacco products, and half of the young men in this age group are smokers. Tobacco use among young people ages 13 to 15 averages about 25 percent in Latin America, which is similar to the incidence in the United States. Among the countries with the highest

Figure 5.21. Tobacco Use by Youth



Source: WHO and Centers for Disease Control and Prevention (CDC), Global Youth Tobacco Survey, various years.

prevalence of adolescent smoking are Argentina, Bolivia, Chile, and Uruguay (see figure 5.21). These countries have a rate that is 15 to 30 percent higher than in the United States.

Young people mistakenly assume that they have control over their smoking habit. Among high school seniors in the United States who smoke, 56 percent said that they would not still be smoking in another five years, but only 31 percent of them had in fact quit five years later (Gruber and Zinman 2001). Moreover, looking just at those who smoked more than one pack per day, the smoking rate five years later among those who stated that they would not be smoking (74 percent) was actually higher than the smoking rate among those who stated that they would be smoking (72 percent). This has serious implications for the future, since expenditures on tobacco may crowd out more productive uses of household income. For example, World Bank (2006a) shows that in the poorest households in some low-income countries, as much as 10 percent of total household expenditure is for tobacco. This means that these families have less money to spend on vital basic items such as food, education, and health care. In addition to its direct health effects, tobacco leads to malnutrition, increased health care costs, and premature death. It also contributes to a higher illiteracy rate, as money that could have been spent on education is spent on tobacco instead.

Cigarettes can also be a gateway to marijuana and other drug use. A number of studies examining the role of cigarettes in the progression of drug use, using school-based samples of adolescents followed into adulthood, have noted a pattern of progression from nonuse to tobacco, to marijuana, and to other illicit drugs in the United States. A longitudinal study of a population of Colombian adolescents found that earlier adolescent cigarette smoking was directly associated with later marijuana use, other illicit drug use, and problems with drug use. The odds of marijuana use were two to three times higher among adolescents who reported smoking cigarettes, even after controlling for demographic, personality, and peer factors (Siquiera and Brook 2003).

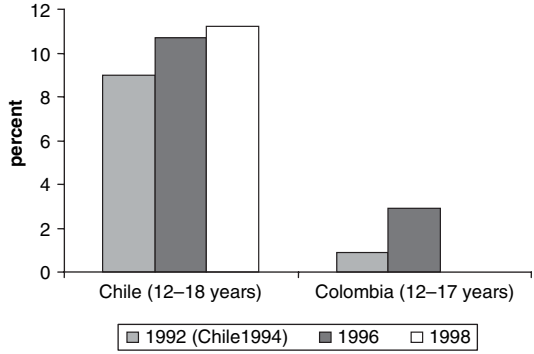
Cannabis (marijuana) is the major illicit drug abused by young people in South America, though at levels much lower than in Europe and the United States. Of young people in LAC who claim to have used cannabis at least once, the range is from a low of 2 percent in Peru and the Dominican Republic to a high of 23 percent in Chile, compared with 36 percent in the United States. Cocaine and coca paste have been used by 0.3 percent (Peru) to 6.4 percent (Bahamas) of young people in LAC, with similar rates in the United States and Southern Europe. Inhalants, which are not under international control, are also widely used in the region, by up to 14 percent of LAC youth (see table 5.9), and even more by U.S. youth. Although no quantitative data exist, anecdotal evidence suggests that the poor use inhalants, partly because they

Table 5.9. Lifetime Prevalence Rates of Use of Cannabis, Cocaine, and Inhalants among Young People, 1990–1997
(*percentages*)

	Cannabis	*Cocaine*	*Inhalants*
Brazil	7.6	2.0	13.8
Colombia	2.9	0.8	5.9
Chile	22.7	3.4	3.4
Bolivia	3.6	2.3	9.9
Peru	1.7	0.3	3.0
Jamaica	17.0	—	—
The Bahamas	16.6	6.4	—
Dominican Republic	1.8	1.4	3.6
United States	35.9	6.0	19.0
Spain	26.0	3.2	3.3
Portugal	8.5	0.8	3.3

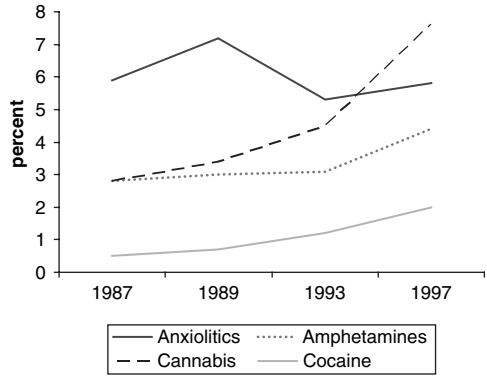
Source: UN 1999.
Notes: — indicates that the statistic is not available.

Figure 5.22a. Cannabis Use among Teenagers in Chile and Colombia



Source: UN 1999.
Note: Because of the difficulty in measuring drug use and the difference in age groups for which data are reported, the point estimates in these figures differ from those presented in table 5.9. No data for Colombia for 1998.

Figure 5.22b. Use of Various Drugs by Students 10–18 Years Old in 10 Brazilian Capital Cities



Source: UN 1999.
Note: Because of the difficulty in measuring drug use and the difference in age groups for which data are reported, the point estimates in these figures differ from those presented in table 5.9.

lack funds to purchase more expensive drugs. In the Dominican Republic, there is a high prevalence of use of tranquilizers (12.8 percent of females and 6.5 percent of males) and stimulants (6.2 percent of females and 4.4 percent of males), as opposed to the more common marijuana consumption in the rest of the region (UNODC and World Bank 2007).

The lifetime prevalence of cannabis use among young people ages 12 to 18 has been increasing in countries for which such data exist. In Chile, the abuse of cannabis was particularly high between 1994 and 1998; Chilean national surveys registered a constant increase in the abuse of cannabis (see figure 5.22a). Similar trends are evident for cocaine, but the percentages are well below those for cannabis (UN 2001). Amphetamines, cannabis, and cocaine use in Brazil continuously increased between 1987 and 1997, reaching 4 percent, 9.5 percent, and 1 percent, respectively, by 1997 (see figure 5.22b).

In conclusion, the scarce evidence on substance use in LAC shows that young people are not particularly heavy drug users. However, the trends are going in the wrong direction, with increased binge use and increasing use of these substances by younger age groups.

The reasons why young people choose to use drugs, engage in violent behavior, have risky sex, remain jobless, or leave school before gaining the skills required to survive in the future are the subject of the next chapter.

Notes

1. Shonkoff and Phillips (2000) argue that different stages of the life cycle may be critical to the formation of certain skills.
2. Rather than income, households are classified according to their ranking in the distribution of household per capita consumption expenditures or an index of household asset ownership and housing characteristics, depending on data availability in each household survey (Filmer 2006).
3. Authors' calculations from Barro and Lee 2001.
4. Authors' calculations from Barro and Lee 2001.
5. The OECD began PISA to provide measures of student knowledge and skills that are comparable across countries. The program has since carried out three surveys (in 2000, 2003, and 2006) that collected information on the performance of 15-year-olds in mathematics, science, reading, and problem solving. These tests are designed to assess the extent to which students near the end of compulsory education have acquired some of the knowledge and skills that are essential for full participation in society (OECD 2004).
6. Below Level 1 in the reading scale implies that the mean score was below 335 points in an exam in which the mean score was normalized to 500 points. Below Level I in the mathematics scale implies that the mean score was below 358 points in an exam in which the mean score was normalized to 500 points.
7. The PISA 2003 collected information to analyze the relationship between students' performance and their socioeconomic background, as measured by

the PISA index of economic, social, and cultural status. It then estimated the proportion of the variance in student performance between schools that is attributable to students' socioeconomic backgrounds.

8. See, for example, Blanchflower 1999; Blanchflower and Freeman 2000; Cunningham, forthcoming(a); Fares, Montenegro, and Orazem 2006; and Ryan 2001.
9. This is consistent with global findings reported by the World Bank (2006a).
10. The rates are similar for nonpoor school leavers in Brazil. In Mexico, one in five school leavers ages 15 to 18 who do not find a job within three months are unemployed, while four in five are inactive. In Argentina, three in five are inactive, and two out of every five who did not find a job within six months are unemployed (Cunningham, forthcoming, a).
11. The correlation between unemployment and inactivity for the countries in the sample is –0.70.
12. This exercise did not strictly allow us to claim that the young people have not worked since leaving school, because we only observe them at discreet points over four-month (Brazil), one-year (Mexico), and two-year (Argentina) periods. However, given the average duration of employment of six to nine months, as discussed above, we should, at least in the Mexico and Brazil cases, be capturing the nonworkers.
13. The sample size was too small to be disaggregated by the socioeconomic status of the family.
14. See Fields (1990), Lopez-Castaño (1990), and Peattie (1982), who found a tendency for employees of large firms to leave and open their own business. Aroca and Maloney (1997), formalizing this insight, found confirmation in a logit analysis for Mexico tailored to the rotating panel context data from the National Urban Employment Survey.
15. The United States' rate of 60 births per 100,000 girls ages 15 to 19 is slightly higher than the rate in the LAC countries with the lowest fertility rates: Argentina, Brazil, Chile, Colombia, Mexico, St. Lucia, and Uruguay. This is a recent pattern, though, because in the past, the United States had a lower rate than any of the LAC countries.
16. The U.S. Census Bureau International Database has different estimates for the population of 15- and 19-year-old women, so the reader is advised to consult more than one source on this question.
17. The quality of HIV/AIDS data is increasingly being questioned, so the numbers presented in figure 5.19 and the discussion should be considered general trends rather than accurate measures of incidence.
18. The use of firearms is known to increase fatalities and intensify violence and was responsible for 80 percent of youth homicides in the United States in the 1990s (Carter Center 1994; Cook and Ludwig 2006).

CHAPTER 6

Identifying the Factors That Put Youth at Risk

An extensive literature identifies a number of factors that give young people the incentive to engage in risky behavior or set up the situation that enables young people to engage in risky behavior. This chapter does not attempt to repeat the rich information contained in those studies (CEPAL 2004b; National Research Council and Institute of Medicine 2005; World Bank 2006a), but instead briefly reviews the main findings in the literature and offers additional factors that are often overlooked in understanding the issues and designing policy.

In particular, we return to the conceptual framework presented in chapter 3 and ask which factors at the individual, micro, and macro levels can explain why some young people engage in risky behavior and others do not. Studies from the United States have found that the most important influences on whether young people will engage in risky behavior are their relationships with their parents and schools, followed by a host of other individual characteristics (such as rage, self-esteem, religiosity, tolerance, and sensation seeking), household influences (such as substance abuse in the household and domestic violence), and peer and community influences. Although this evidence and the prominence of these factors in policy making are well established in the United States, both are largely absent in Latin America and the Caribbean.

This chapter brings together the few existing studies that have examined these factors in LAC (see box 6.1).

We first review the factors associated with each of our five kinds of behavior, and then we discuss in detail the factors that recur in the analysis and the cumulative effect of the key risk factors and protective factors.

Box 6.1

Methodology for Identifying Risk and Protective Factors That Are Correlated with Risky Youth Behavior

When using cross-sectional data, two methodologies are commonly used to identify which risk and protective factors are associated with which kinds of risky behavior and which negative outcomes. The first is a simple Pearson correlation (for continuous variables) or odds-ratio (for discrete variables), which identifies the factors and behaviors or outcomes that move in the same directions. Although this methodology tells us which variables move together, it tells us little about which factors explain most of the variance observed in a behavior or outcome. This can be obtained by running stepwise regressions, where all possible explanatory variables are included in an ordinary least squares regression, and cutoff rules are identified so variables are kept in the regression only if they meet those cutoff criteria. As this methodology is subject to bias by the order in which variables are accepted or rejected, the methodology can be repeated using the strategy of starting with only one explanatory variable and adding variables to the regression, subject to a cutoff rule.

This methodology is used to analyze special youth surveys for Brazil, Chile, and Mexico because the surveys included information about home, community, and macro social factors. A description of the data and a fuller description of the methodologies are given in Cunningham and Bagby (forthcoming) and World Bank (2007b).

In the analysis of the role of the macroeconomy and household poverty, we used panel data from Argentina and Mexico. Standard OLS regressions, with differenced variables of interest (labor force entry, early school leaving, household job loss, and macroeconomic fluctuations) were used to estimate the impact of macroeconomic fluctuations on school leaving and on labor force entry by young people. The impact of household poverty (through an unexpected job loss) and an increased demand for household labor (through a parent starting a firm) were also measured. (Details are given in Cunningham and Maloney, forthcoming).

Why Young People Engage in Risky Behavior

This section presents the factors that lead young people to engage in risky behavior. It classifies those factors according to individual level, micro level, macro level, outcomes/behavior, and "other" categories. The first three categories strictly correspond to the framework presented in chapter 3. A category for "outcomes/behavior" reflects the observation that engaging in one kind of risky behavior may predispose young people to engage in other risky behaviors. It is a deeper treatment of the discussion at the end of chapter 4.

Leaving School without Learning

Young people who have left school tend to give a long list of reasons why they did so. Table 6.1 shows the results of quantitative and qualitative data collected across the LAC region. The answers given by the young respondents suggest that a broad range of factors is responsible. Because opinion data have their limitations for analytical purposes, we also look beyond the responses of young people.

Micro-level factors: household poverty, lack of parental support, low school quality, and difficult access—Perhaps the most commonly cited reason for leaving school is household poverty or the need to work.[1] In the countries considered in table 6.1, 10 to 38 percent of dropouts say that money was the driving factor for leaving school, while all the focus groups cited this motivation. Duryea, Edwards, and Ureta (2003) found that a 20 percent increase in household income in Brazil was associated with an increase in school attendance of 1.4 percentage points. While the budget constraints on school attendance have been recognized by governments in the past (Angrist, Bettinger, and Kremer 2006), it has recently become a common policy variable in many LAC countries that have created programs to alleviate the costs of school attendance, giving us further insight into the role that poverty plays in school attendance decisions. The *Familias en Acción* program in Colombia—which, among other activities, distributes money to mothers whose children attend secondary school—has increased secondary school attendance by 7 percentage points in rural areas and by 4 percentage points in urban areas (Attanasios, Meghir, and Santiago 2005). The evaluations of Mexico's *Oportunidades* program, also a conditional cash transfer program, find an increase of 8 percentage points (Skoufias and Parker 2001). A new program in Bogotá, Colombia, which rewards cash transfers to secondary school youth who complete their course of

Table 6.1. Reasons Young People Give for Leaving School
(*percentages*)

	Argentina	*Chile*	*Colombia*	*Dominican Republic*	*Haiti*	*Honduras*	*Mexico*	*Peru*
Financial								
Money	10.5	33.4	21.0	✓	38.8	✓	21.5	✓
Needed to work	25.4	27.6	6.0	✓	3.2	✓	18.1	✓
Personal								
Mother/fatherhood	n.a.	17.4	n.a.	n.a.	n.a.	✓	n.a.	✓
Married	n.a.	n.a.	n.a.	n.a.	3.0	✓	12.4	n.a.
Personal reasons	49	n.a.	n.a.	n.a.	n.a.		n.a.	n.a.
Dedicated to family	n.a.	n.a.	3.0	n.a.	n.a.	✓	n.a.	n.a.
Lack of parental support/ encouragement				✓				✓
School quality								
Academic difficulties	3.6	7.2	n.a.	n.a.	4.2	n.a.	n.a.	✓
Don't like to study	n.a.		3.0	n.a.	10.2	✓	22.5	n.a.
Material not useful	0.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	✓
Finished school	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7.7	n.a.
Inconvenient hours/location	n.a.	n.a.	n.a.	✓	n.a.	✓	n.a.	✓

Sources: Dasso 2006 (Peru); ESA Consultores 2001 (Honduras); IDDI 2006 (Dominican Republic); Justensen, forthcoming (Haiti); World Bank 2001 (Argentina); CEPAL 2004b, 191 (other countries).
Note: The results from the Dominican Republic, Honduras, and Peru are derived from a nonrepresentative sample of qualitative data and thus cannot be quantified; if the reason was stated in the focus groups, it is given a check in the table; n.a. indicates that the particular response was not a response option in the corresponding country survey or it was not reported in the referenced study. The data from Chile, Colombia, and Mexico come from youth questionnaires, and the numbers refer to percentages of all youth surveyed (including those still in school, so the columns do not add up to 100 percent).

education, has a greater impact than similar programs that provide cash transfers for school attendance only (Barrera-Osorio et al., forthcoming).

An unexpected negative shock to household income often results in the children of the household dropping out of school. For example, there is evidence that, if a parent loses his or her job in Mexico and Argentina, then young people ages 12 to 24 are more likely to leave school (Skoufias and Parker 2001). Young people from poor families, where a job loss can have an enormous negative effect on household income, are particularly affected (Cunningham and Maloney, forthcoming).

In these situations, children of the household may have to drop out of school because there is a shortage of resources needed to pay for school materials and transportation. However, there may also be a new and pressing need for the young person to contribute to household income.

This is particularly true during the youth years, when the person is more employable than as a child.[2] Of the respondents in table 6.1, 6 to 28 percent say they left school because they needed to work, and all of the young people interviewed in focus groups also cited this reason. In Argentina and Mexico, young students of all ages were more likely to leave school if their parents started a firm.[3] Attending school while working has a negative impact on school learning; in nine Latin American countries, students who work longer hours have test scores that are 11 to 16 percent lower than those who are not working.[4]

More recent evidence suggests that home and school environments are the key factors for keeping young people in school. Blum, McNeely, and Rinehart (2002) found that young people in the United States who feel a sense of connection to their parents and to their schools are less likely to leave school early. Similar results are emerging for LAC. Young people in Argentina, the Dominican Republic, Honduras, and Peru say that they left school because their parents did not encourage them to attend or do well in school (Dasso 2006; IDDI 2006; Miodosky 2006; World Bank 2006k). Turning to quantitative data, Chilean and Mexican girls who feel that they have a positive emotional connection with their mothers are more than twice as likely to stay in school than those who do not. Chilean girls who feel connected to their fathers are 80 percent more likely to stay in school than those who do not feel close to their fathers. Mexican boys who feel they have a connection to their mothers are twice as likely to stay in school as those who do not, while both Chilean and Mexican boys who feel an emotional connection with their fathers are 50 percent more likely to be in school.[5] Brazilian students who feel connected to their parents and schools have lower grade repetition rates than their peers (Koller et al. 2005). Nineteen percent of Honduran young people whose parents do not spend time supporting their schoolwork have repeated grades or left school, but only 11 percent of those with parents who help them with their schoolwork have engaged in risky behavior.[6]

Young people's experiences at home also influence the likelihood of them dropping out of school, although this factor is not as strong as the emotional bond with the parent. Argentine, Caribbean, and Chilean young people living in households with physical, sexual, or psychological abuse have a lower tendency to stay in school than do youth from less violent households (Cunningham and Bagby, forthcoming; Justensen, forthcoming; World Bank 2003a). When we control for the relationship with the parents, household poverty, and other individual and micro factors, abuse does not emerge as a key explanatory factor for early

school leaving. Ten percent of young people in Chile and Mexico report severe household abuse, so perhaps it is not an endemic problem across the youth population, or perhaps abuse is not highly correlated with the control factors. However, it is an important factor for young people who experience it. The (unconditional) correlation is also observed in Honduras, but it is not statistically significant (ESA Consultores 2001).

Limited access to schools is a well-known factor that can lead to early school leaving, but it may be a more complex issue than just distance in rural areas. In any case, there has been some success in expanding access to schooling in rural areas, particularly by making schools more efficient—*Escuelas Nuevas* in Colombia combines grades into one location and adapts curricula to be more student-oriented than classroom-oriented—or by introducing more technology—the *Telesundaria* programs in Brazil and Mexico transmit televised lessons to students in rural areas.

However, school access is not just a rural issue. Young people have also pointed to problems, particularly violence, in urban slums. According to a UNESCO study, 65 percent of Brazil's public schools are unsafe environments (Abramovay and Rua 2002), and 10 percent of Caribbean young people carry weapons to school (World Bank 2004). Young Brazilians and Hondurans living in urban slums have described the fear of walking to school through rival gang territories (ESA Consultores 2001; World Bank 2007b); in response, chaperone programs have been developed in some Brazilian neighborhoods (World Bank 2007b).

The school environment also influences young people's decisions about whether or not to stay in school. As discussed in the previous chapter, schools can be a source of protection from dangerous neighborhoods and homes, or they can be a source of violence. School dropouts in the Caribbean report that corporal punishment and fights with teachers are regular occurrences (World Bank 2004), while Honduran young people feel that their teachers are excessive disciplinarians (ESA Consultores 2001). Bullying in school is a factor that is well recognized in the United States, though less acknowledged in the LAC region.

Students also cite low school quality as a reason for leaving school early. Although only 0.7 percent of Argentine dropouts gave this as the primary reason for leaving school (see table 6.1), girls in Mexico who do not believe that school quality is high are 40 percent more likely to drop out of school than girls who believe that schools provide a quality education (Cunningham and Bagby, forthcoming). Former students in Brazil, Honduras, and Peru claim that schools do not teach the skills that are relevant for the workforce. This may be true—as LAC economies

become more service-sector oriented (CEPAL 2004b), interpersonal skills, creative thinking, and problem solving are valued more by employers than the traditional school curricula and teaching methods from the 1960s that were designed when manufacturing and agriculture were the main sectors of economic activity (World Bank 2006a). Furthermore, in many schools, attendance is stressed more than actual learning. And, even if the curricula were relevant, young people complain that teachers are not adequately trained or motivated.

Despite the disconnect between today's curriculum and the needs of the labor market, the situation may be less dire than young people perceive. Namely, today's students may not have enough information about how the labor market values their continued education. A recent experiment shows that young people may be underestimating the value of an education. Dominicans who were completing primary school and given accurate information about postsecondary school earnings were 12 percent more likely to complete secondary school than those who were not given this information (World Bank 2006a).

Macro-level factors: lack of a birth registry, social norms, and gender, but not overall poverty—In the LAC region, it is estimated that more than one in six births, or close to 2 million of the 11 million annual births, go unregistered (UNICEF 2006).[7] Poor, rural, and indigenous populations are the least likely to be registered. Within these groups, the populations most affected are children from ethnic minorities, children residing in areas affected by armed conflict, the internally displaced, and refugees. Young people who are not registered usually cannot attend school, which means that, ironically, the most vulnerable groups within the youth population are being excluded from schools—the institution that can perhaps best serve as a protective factor for these young people.

School attendance is required through grade 12 in many countries (Ibarrola 2004, 24), but early school leaving may be more affected by social norms than legal requirements. Although young people begin dropping out of school from their first year onward, there are significant dropout points at the end of education cycles. For example, the transition from primary to secondary school is made by far fewer students than the transition from the fifth to the sixth grade, and a similar trend is apparent for the transition from secondary to tertiary education. Thus, parents and students seem to be responding to the idea that completing a certain stage of school is important, regardless of what the laws direct.

Gender plays a mixed role in school attendance. Secondary school attendance is higher for females than males in Latin America, and particularly in the Caribbean. The social expectation that boys should start working early and the assumption that schools are greater protective environments for girls than boys partly underlie this result. However, girls in rural Peru and in the *bateyes* of the Dominican Republic say that their parents' prejudice against girls' learning and the expectation that they should marry and leave the household is the main reason for their early school leaving (Dasso 2006; IDDI 2006).

The role played by economic wealth in school leaving is not clear. Countries with a lower per capita income have lower educational attainment rates than those with a higher per capita income. However, there is little evidence that school spending increases school attendance or improves learning (di Gropello 2006). And when a country experiences a negative shock to per capita GDP, school attendance either remains unchanged or increases. For example, while the economic crises in Brazil from 1982 to 1998 decreased family income, the opportunity cost of schooling also fell, so, in net terms, school attendance did not change (Duryea, Edwards, and Ureta 2003). The crisis in Peru resulted in an increase in grade completion and had no effect on school attendance (Schady 2006). Skoufias and Parker (2001) also found that there was an increase in school attendance as a result of Mexico's crisis in 1994–1995. And Cunningham and Maloney (forthcoming) found that the crises in Argentina and Mexico had no effect on school attendance in those countries.

Individual-level factors: social inclusion and behavioral skills—Feeling connected to people and institutions is an important factor that drives school attendance, and this extends to other relationships as well. Young Chilean women who feel socially excluded are twice as likely to drop out of school as those who do not feel excluded (after controlling for education, ethnicity, age, gender, and household poverty, among other factors). Socially excluded men are 20 percent more likely than nonexcluded men to have left school before completing the secondary level. In addition, Chilean men and women who feel a general sense of belonging to their families and communities are 40 percent more likely to stay in school (Cunningham and Bagby, forthcoming). Similarly, young Brazilians who feel that they have peers who care about them repeat grades less often than those with no close friends (Koller et al. 2005).

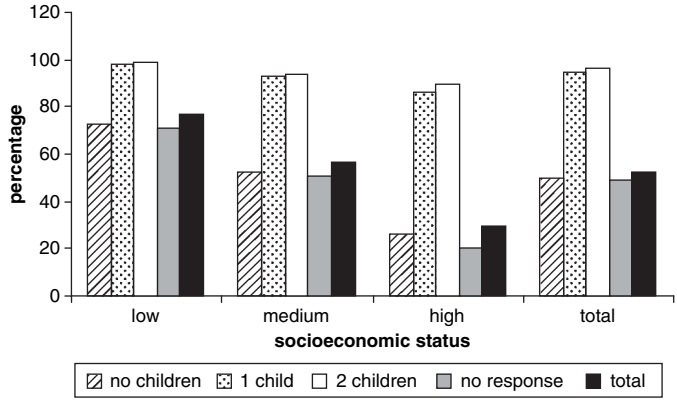
Mental health is believed to be an important factor influencing school attendance. Evidence from programs across the world that help young people to develop self-confidence and motivation also find that their beneficiaries are more likely to stay in school if they feel good about themselves (World Bank 2006a). Looking specifically at data from LAC, Brazilians with low self-esteem have higher school repetition rates. However, while feelings of well-being or optimism are correlated with continued school attendance in Chile and Mexico, they are not key factors in explaining school attendance decisions (Cunningham and Bagby, forthcoming; World Bank 2007b). Spirituality was also correlated with less grade repetition in Brazil and less early school leaving in Chile and Mexico, but it was not a key explanatory factor for school attendance decisions (Cunningham and Bagby, forthcoming; Koller et al. 2005).

Behaviors and outcomes: motherhood, poor school performance, early employment, and alcoholism—Motherhood is often cited as a reason for young women leaving school early (CEPAL 2004b), either because schools push out young women who are pregnant or because the young mothers find it difficult to balance school, work, and motherhood. Among Chilean women who have left school, 17.4 percent reported motherhood being the reason (CEPAL 2004b), and young Honduran women repeatedly cited this rationale as well (ESA Consultores 2001). School attendance is almost nonexistent among 17-year-old mothers in the poorest households in many LAC countries, but a significant proportion of teenage mothers from households with higher socioeconomic status stay in school, particularly in Panama and Uruguay (CEPAL 2004b).

However, early school leaving among adolescent women in the LAC region is not primarily due to early pregnancy, at least not for the poor. Figure 6.1 shows that for girls from better-off households in Mexico, having a child increases the probability of early school leaving from 30 percent to 85 percent, but for poor girls the increase is much smaller. In fact, more than 70 percent of 17-year-old women from poor households are not enrolled in school whether they have children or not. Thus, reducing early pregnancy will not be enough to reduce early school leaving.

Marriage has been identified as a risk factor for early school leaving in LAC (Cunningham and Bagby, forthcoming; ESA Consultores 2001; World Bank 2006a). Among Haitians and Mexicans who have left school, 3 percent and 12 percent, respectively, cited marriage as the motivation (table 6.1). Young people in the Dominican Republic, Honduras, and Peru defined marriage as a change in one's role in society,

Figure 6.1. Percentage of 17-Year-Old Girls Who Are Not in School by Number of Children and Socioeconomic Status, Mexico



Source: CEPAL 2004b. Based on census data.

in which one leaves the dependency of childhood and enters the world of adulthood and forms one's own household; it does not require continued school attendance (Dasso 2006; IDDI 2006; World Bank 2006k).

School leaving is also linked to grade repetition. Grade repetition is high in LAC, as shown by gross enrollment rates in the region that exceed 100 percent (UNESCO 2007). However, the extent of repetition is shocking: 15 percent of Brazilians age 14 have repeated a grade at least twice, and 4 percent have repeated a grade four times. This has a psychological effect, as older adolescents feel uncomfortable sharing a classroom with those younger than themselves (ESA Consultores 2001). It also has economic implications: the opportunity cost of attending school is higher for the older adolescents because their earnings potential is larger than that of their younger classmates.

Alcohol consumption reduces academic performance, even after accounting for additional covariates such as risk and time preferences, mental health, self-esteem, and other substances used (DeSimone and Wolaver 2005). To the extent that students' high school academic performance affects the quality of the postsecondary institution into which they will be admitted or the job that they will be able to obtain after completing high school, the negative impact of drinking on high school grades can have a long-term impact on young people's human capital.

As discussed above, early employment leads to poor school performance and a higher likelihood of dropping out. Three to 25 percent of

secondary school–age people in LAC both attend school and work (Duryea, Edwards, and Ureta 2003). Young people attest to how difficult this can be because of either competing time demands or simple exhaustion (Dasso 2006; IDDI 2006; Miodosky 2006; Weiss 2006; World Bank 2006k). The school and work combination is highly correlated with grade repetition, and it has negative implications not only for how much the young people learn and how well they do their jobs, but also for their overall development.

Early Labor Force Entry and Joblessness

A survey of young Brazilians living in poor neighborhoods found little consensus on the factors that limit their access to jobs. More than half of the sample identified only pregnancy and physical disability as harmful factors. There was much more agreement on the factors that help them to get a job, ranging from skills to personal connections to physical appearance (see table 6.2).

The literature in LAC attributes young people being jobless to a range of different factors. The micro-level factors are less strong in explaining difficulties in labor force entry than they are in explaining early school leaving. Instead, the macro-level and individual characteristics, as pointed out by the young Brazilians, seem to better explain employment constraints.

Micro-level factors: household poverty and relationship with parents—Household poverty is a key factor in explaining early entry to the labor force. Young people in poorer households have higher labor force

Table 6.2. How Young Brazilians Perceive the Factors That Affect Their Employability

Perception that the factor hurts the chances of getting a job	*Perception that the factor improves the chances of getting a job*
Pregnant	Literate
Physical disability	Education completed
	Know how to work with computers
	Demonstrate skills
	Former work experience
	Recommended by a friend
	In good health
	Have good teeth
	Wear new clothes to the interview

Source: Koller et al. 2005.
Note: More than 50 percent of the sample gave each response.

participation, but by examining what happens when a poor household suddenly becomes poorer we can pinpoint the cause as poverty rather than other correlated factors of growing up in a poor household. When a parent unexpectedly loses a job, household members ages 12 to 24 years are more likely to join the labor force (Cunningham 2001; Skoufias and Parker 2001; World Bank 2001). In Mexico, a job loss by either parent—but particularly by the mother—leads to a higher likelihood that boys and girls ages 12 to 24 will begin working. This change does not affect the poorest families more than other families on average (Cunningham and Maloney, forthcoming), but in Chile, Honduras, and Mexico, young people from poor families join the labor force at a younger age than those from less poor families.

Early labor force entry is associated with weak family relationships and no feeling of connectedness with school. Young Chileans who have a weak relationship with their fathers are 5 percent more likely to start work at a young age than those with a strong parental bond. Young Mexicans with bad relationships with their parents are 20 percent more likely to be jobless than the average,[8] while those who were physically, sexually, or psychologically abused by a parent, or whose parents had a habit of substance abuse, also tended to be inactive (not in school or work). Conversely, young men and women with strong feelings of connection to their parents, schools, local institutions, and their peer groups tend to enter the labor force later, and older youth who feel connected are much more active in the labor force (Cunningham and Bagby, forthcoming).

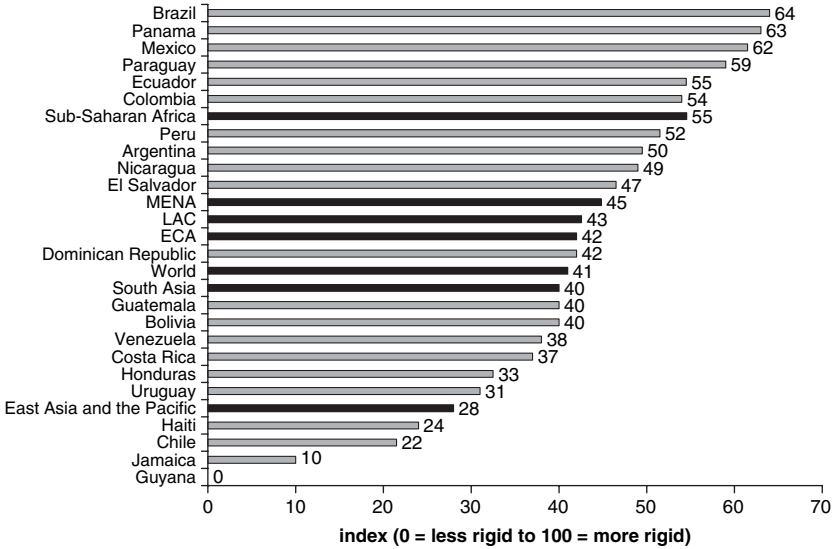
Macro-level factors: demographics, laws, and gender—A demographic youth bulge contributes to high youth unemployment rates in countries where the job growth rate is lower than the population growth rate. As discussed in chapter 3, the number of young people in LAC continues to grow, particularly among those groups likely to be most at risk. In many countries, population growth rates exceed employment growth rates, thereby contributing to greater unemployment and inactivity rates among the youth population. Also, as women are increasingly educated and enter the labor force, there is further crowding (World Bank 2006a). However, as shown in chapter 5, most young people become employed fairly soon after leaving school, except for those in high-unemployment economies.

Labor laws may contribute to youth unemployment. Countries in LAC have some of the most highly regulated and inflexible labor markets, according to the Rigidity of Employment Index. The labor markets

in Brazil and Mexico, where more than half of the LAC region's youth are concentrated, are significantly more rigid than the average for all other regions (see figure 6.2). The fact that labor markets in Latin America are among the most regulated and rigid in the world does not just affect young people, but it affects them disproportionately, particularly at-risk youth.[9]

For example, severance pay protects older workers at the expense of new labor force entrants. Latin American labor legislation leads to low employee turnover, which limits employment opportunities for new labor market entrants, namely young people. The key culprit is severance pay, which is positively correlated with tenure, thus giving employers an incentive not to fire older workers and giving workers an incentive to stay in their jobs for long periods of time (Heckman and Pages 2004). Furthermore, it is risky for employers to hire young workers because legislation imposes severance benefits after a short tenure, giving employers very little time to observe the skills of a new employee and determine whether he or she will fit well into the firm. Thus, while the severance

Figure 6.2. Rigidity of Employment Index in Select LAC Countries and Other Regions, Average 2004–2005



Source: Authors' calculations based on data from the *World Development Indicators 2006* (World Bank 2006b).
Note: MENA = Middle East and North Africa. ECA = Europe and Central Asia. The countries included in these regions, as well as those in Sub-Saharan Africa and East Asia and the Pacific, are those defined by the World Bank. See http://www.worldbank.org/countries.

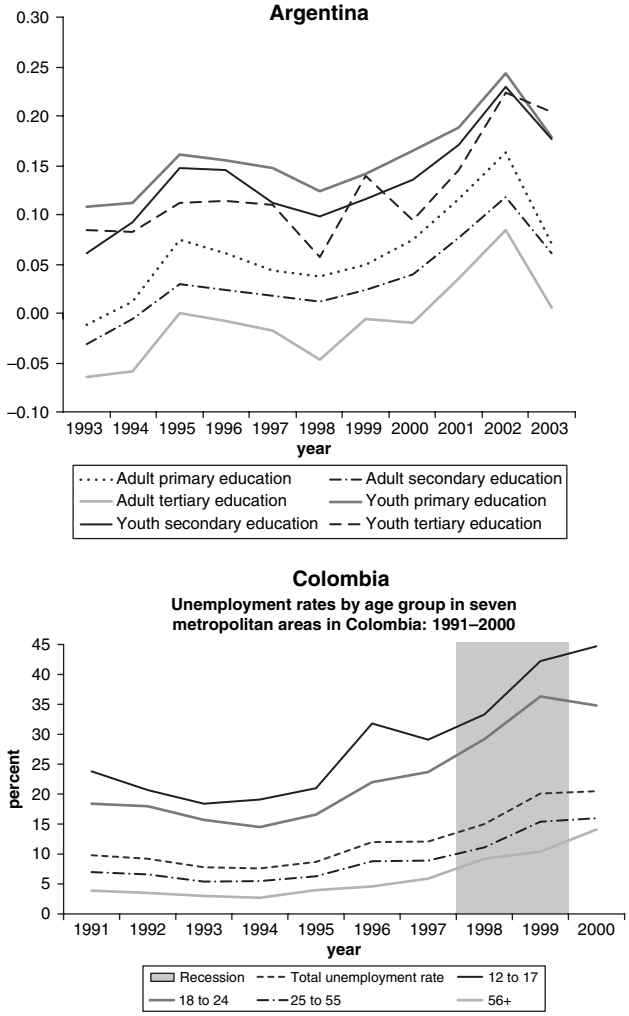
laws protect the interests of more established workers, they are particularly harmful to young workers.

The minimum wage has a positive impact on wage levels but has a negative impact on the employment prospects of young people. All LAC countries have a minimum wage. It tends to be locally binding, which means that workers whose market wage is close to the minimum wage will end up being paid the minimum (Kristensen and Cunningham 2007). Thus, in low minimum wage countries, low wage earners—namely young people—will benefit from any increase in the minimum wage. However, having a legal minimum wage causes unemployment, particularly in countries with a high minimum wage relative to the average wage, and the young tend to feel these negative effects disproportionately because they are the first to be fired when firms fire workers to pay their remaining workers a higher wage (Brown 1999; Cunningham 2007).

Young women's labor market prospects are generally bleaker than that of young men. Women's role as wife and mother tends to start at the same time as labor force entry would occur. Given the heavy domestic demands placed on young women, they need to be offered a very good-paying job to compensate them for the time that they have to spend away from their domestic responsibilities. But because new labor force entrants, especially those with low education levels, are paid low wages, many young women from at-risk backgrounds will choose to spend their time on household duties rather than working outside the home. For example, 20 percent of nonworking Peruvian women ages 19 to 24 state that they are not working because of their household responsibilities, compared with 6.6 percent of men of the same age (Author's calculations, Perú – Encuesta Nacional de Hogares [ENAHO] 2001). As the children of the family age and women's household activities decrease, women start to go out to work (Cunningham and Ramos 2004). Men who form households, on the other hand, are expected to provide for their families, which means that more men with families are employed than those who have no dependents.

Although a dynamic labor market is necessary for youth employment, macroeconomic conditions are not responsible for the fact that youth unemployment rates exceed those of adults. The role played by the macroeconomy could be identified by looking at fluctuations in real GDP growth and in youth and adult unemployment over the business cycle. For example, Figure 6.3 shows that as the economy grew in Argentina and Colombia, youth unemployment declined, and the reverse was also generally observed, thus revealing a positive correlation

Figure 6.3. Unemployment Rates over the Business Cycle



Sources: Argentina: Justesen, forthcoming; Colombia: author's calculations based on *Encuesta Continua de Hogares*, Departamento Nacional Administrativo de Estadística (DANE), Colombia, 2004.

between low economic growth and youth unemployment. However, after controlling for parental job loss, the relationship between macroeconomic fluctuations and youth unemployment disappears.[10]

A lack of access to sources of financing is not a key reason why young people are not working, according to young people themselves (see table 6.3). This is not surprising given the evidence in chapter 5 that

Table 6.3. Reasons for Not Searching for a Job, Peru (2001)
(*percentages*)

	15–18	*19–24*	*15–24*	
			Poor	*Nonpoor*
There is no work	28.5	39.7	43.5	39.5
Lack of experience	5.0	3.5	4.2	9.0
Studies do not allow it	48.5	26.0	30.5	22.2
Housework does not allow it	6.6	20.8	14.1	17.4
Lack of capital	0.6	0.9	0.8	1.2
Other	10.8%	9.1%	6.9%	10.8%

Source: Author's calculations from Peru National Household Survey – Encuesta Nacional de Hogares (ENAHO) (2001).

self-employment—the only sector for which access to financing may be an issue—is not a common occupational choice for young people. Furthermore, chapter 5 showed that young people from nonpoor families, who presumably face less stringent budget constraints, also have low rates of self-employment.

Adults who lack identity documents (such as birth certificates and national ID cards) because their births were not registered have difficulty obtaining employment, accessing credit, opening a savings account, and inheriting property. Furthermore, they are at greater risk of experiencing abuse and exploitation by employers.

Individual-level factors: discouragement and social exclusion—Many young people who do not work are actually discouraged workers. For example, one-third of Peruvians ages 15 to 24 argue that there are no good jobs available, and this increases to 44 percent among the poor. Another 4 percent believe that they do not have the experience necessary to find a job, and that percentage more than doubles in the case of the nonpoor (see table 6.3). If we drop students and home caregivers from the table, most unemployed Peruvians are not working because they feel that there are no jobs available to them. This may be related to labor legislation that limits the number of job opportunities for new entrants or it may simply be due to competition in a high-unemployment labor market.

A lack of information may also fuel the perception that no jobs are available. Younger workers in particular use informal methods for finding a job. For example, 47.4 percent of unemployed Peruvians ages 15 to 18 and 33.4 percent of unemployed Brazilians of the same age group asked their friends or family for employment information (see table 6.4). By the ages of 19 to 24, this practice falls by 10 percentage points, as these job seekers become more likely to use want ads or to visit employers

Table 6.4. Methods for Finding Employment

	Peru		*Brazil*	
	15–18	*19–24*	*15–18*	*19–24*
Asked an employer	31.5	34.9	48.8	49.5
Used an employment agency	3.9	4.4	10.2	10.9
Asked friends and family	47.7	35.2	33.4	24.3
Read want ads	13.9	21.6	3.2	5.5
Registered for/took a class	—	—	2.5	7.7
Took action to start a firm	—	—	0.4	0.8
Other	0.8	1.6	1.4	1.3

Source: Author's calculations from Peru National Household Survey – ENAHO (2001); and from the Brazilian *Pesquisa Mensual de Emprego* (2003).

to find work. According to young people in Peru, this lack of knowledge about how to search for a job is a key reason why they fail to take the initial steps to secure employment (Dasso 2006).

Young people who have a sense of their own capabilities have lower levels of inactivity than those who are less confident in their abilities. Young Chileans and Mexicans who have a positive outlook on life and are optimistic by nature are 20 percent less likely to be inactive than their more pessimistic colleagues (after controlling for household characteristics, poverty level, gender, and age). Also, those with a strong sense of spirituality are half as likely to be inactive in these countries (Cunningham and Bagby, forthcoming).

Those who start working at an earlier age feel more socially excluded than those who begin working later. Young Chileans and Mexicans who felt socially excluded were 9 to 25 percent more likely to have begun working at an early age than those who were not socially excluded, after controlling for household poverty levels. Furthermore, young Brazilians, Chileans, and Mexicans who felt socially excluded or who had few friends tended to be inactive far more than those who felt a part of society (Cunningham and Bagby, forthcoming). These may be the discouraged workers who have no connections to ask about the availability of jobs.

Risky Sexual Behavior

Public policy often assumes that young people engage in risky sex because they lack information about its consequences and about how to avoid the risk, but the evidence does not necessarily support this assertion. Some interventions based on this assumption have been effective—such as Brazil's condom-use campaigns—while others have been less

Table 6.5. Practices Used by Brazilians Ages 14–24 Living in Poor Neighborhoods to Avoid AIDS

	Male	*Female*
Use a condom	55.8	43.6
Avoid sexual intercourse	2.4	2.3
Do not share syringes	12.5	13.0
Frequent medical exams	6.1	12.2
Do not kiss on the mouth	0.5	0.4
Avoid oral sex	5.7	9.3
Good hygiene	15.5	17.0
Other	0.7	1.2
None	0.6	1.0

Source: World Bank 2007b.

effective—such as the abstinence campaigns in Chile and the United States (Blum 2002). Quantitative data from the Dominican Republic show that 40 to 80 percent of young people from poor families know that condoms prevent HIV/AIDS, and yet fewer than 10 percent use them. Focus group discussions with young Dominican women also show that they understand that using condoms prevents HIV/AIDS, but the women boasted about having unprotected sex with their older boyfriends (Luther, St. Ville, and Hasbun 2002). Half of all young Brazilians living in poor neighborhoods use condoms, but many others use different methods that are less or not at all effective in preventing the transmission of disease (see table 6.5).

There is clearly a need to provide young people with more and better knowledge of how to prevent early pregnancy and STIs (Dasso 2006; IDDI 2006; Weiss 2006; World Bank, 2006k). Yet it is puzzling why so many young persons who have the knowledge are not using protection. Several factors may be responsible.

Micro-level factors: household poverty and access to contraception—Factors in their homes and schools may drive young people toward risky sexual behavior. Young men and women in Chile and Mexico who have poor relationships with their mothers are twice as likely to initiate sex at an early age as those who have good relationships with their mothers (Cunningham and Bagby, forthcoming). In the Caribbean, 16- to 18-year-olds who have strong connections with their parents are 5 percent less likely than their less-connected counterparts to have initiated sexual activity by that age (Blum 2002). Young women in Brazil, the Caribbean, Chile, Honduras, and Mexico who engage in risky sex have weak relationships

with their parents, particularly with their fathers. Similarly, those with weak connections to their schools have a greater incidence of early or risky sex than those who feel that someone at school cares about them. Early sexual initiation is a way to make a human connection that the young person is not getting in his or her own home or community.

Young people in Brazil, the Caribbean, Chile, and Honduras who have experienced sexual, psychological, and/or physical abuse in the household or community also become sexually active early.[11] They may be replicating the behavior that they have learned in their own homes (Blum and Ireland 2004; Cunningham and Bagby, forthcoming; ESA Consultores 2001; Koller et al. 2005).

Young people may not use their knowledge of safe sexual practices because they have limited access to contraception. This may be because they live in areas where health clinics and pharmacies are scarce. However, Cunningham and Bagby (forthcoming) have found that women living in urban and rural areas have equal rates of early sexual initiation and risky sex, after controlling for poverty, household characteristics, and level of social exclusion. Another explanation may be that young people cannot afford to buy contraception. Indeed, young people from poorer families are twice as likely as those from nonpoor families to engage in early and risky sexual behavior. A third limiting factor may be that young people do not trust the providers of contraception. For example, Brazilian, Chilean, and Mexican young people who engage in risky sexual behavior tend not to trust local institutions. They do not feel a connection with their schools—which may be their main source of information and support—nor do they trust their local health institutions (Cunningham and Bagby, forthcoming; Koller et al. 2005). For example, 90 percent of 16- to 18-year-old Caribbean young people who feel little connection with school are sexually active, while only 50 percent of those with strong family and school connections are sexually active (Blum 2002). In fact, only 60 percent of young Brazilians from poor neighborhoods trust their local health centers (Koller et al. 2005).

Household poverty is strongly correlated with risky sex and early sexual initiation. Even after controlling for young people's connection with their parents, connection with institutions, abuse in the household, and social exclusion, poverty is a strong predictor of early and risky sexual behavior (Cunningham and Bagby, forthcoming). This fact is not surprising as adolescent pregnancy rates are higher among women from poor families (see chapter 5) than from nonpoor families, but the exact role played by poverty in this outcome is not clear.

Macro-level factors: laws and gender norms—Laws can reduce or create an incentive for risky sexual behavior. For example, having a higher legal age for marriage can delay risky sexual activity (such as sex without protection, which is much higher in marriage than outside it) and early pregnancies. Alternatively, it may encourage other types of risks, such as having multiple sex partners, as the higher incidence of monogamy in marriage is postponed. Laws may also increase the cost of the risky behavior, for example, in countries where abortion is illegal.

Gender is a strong predictor of early and risky sex. Young men tend to engage in sexual activity at a younger age and have more partners than young women, perhaps to live up to the ideal of *machismo*, which is still prevalent in the region, particularly among men from poorer families and those in rural areas (Bannon and Correia 2006). Young women, who have less bargaining power than older women, use contraception less than their (usually older) partners.

Individual-level factors: self-esteem—Many young people decide to initiate sexual behavior to create a connection with another person. CEPAL (2004b) found that 57 percent of young Colombians and 52 percent of young Mexicans reported that they initiated sexual activity as an expression of love. However, 25 percent of sexually active Caribbean young people reported that their first sexual experience was forced (World Bank 2004), as did more than 50 percent of young Peruvians, as reported in chapter 5.

Similarly, those who engage in risky sexual behavior—such as having multiple partners or not using condoms—tend to feel socially excluded (CEPAL 2004b; Cunningham and Bagby, forthcoming; Koller et. al. 2005). The socially excluded are 50 percent more likely to engage in risky sex than those who are not. Their sexual behavior may be an effort to create a connection with someone.

Behaviors and outcomes: the role of early school leaving, joblessness, marriage, and alcohol—Dropping out of school is correlated with early and risky sex. The direction of the causality is not clear, but it may run in both directions. Evidence from Mexico's *Oportunidades* program—which shows a negative correlation between program participation and the number of sexual partners and a positive correlation between program participation and the age of sexual initiation—suggests that school is a protective environment that may affect the underlying factors that otherwise lead young people to early and risky sex (Parker 2006).

Although the LAC region is increasing its tolerance for pregnant students (World Bank 2006a), the constraints of being a mother and a student may be too burdensome for the young women themselves (ESA Consultores 2001; World Bank 2006a).

Inactivity in the labor market may also be a causal factor for early childbearing. Young women who are not working have a much lower opportunity cost of childbearing than women who have jobs. A woman without a job will not have the challenge of balancing work and home, so she may be more inclined to have children than would a woman who is earning an income and has little time or energy to devote to raising a young family.

Alcohol puts young people at risk for other negative kinds of behavior. Alcohol is one of the most commonly cited correlates of risky sexual behavior. Although alcohol use appears to have no causal influence in determining whether a teenager has sex, it is correlated with risky sexual practices (such as unprotected sex and having multiple partners) that increase the chances of contracting an STI (Markowitz, Kaestner, and Grossman 2005).

Crime and Violence

Public policy is rife with assumptions about the causes of youth violence. A commonly cited hypothesis is that violence is a result of boredom among young people who are not working or in school (World Bank, 2006). But not all young people who are not in school or working are violent, which suggests that other factors are at play.

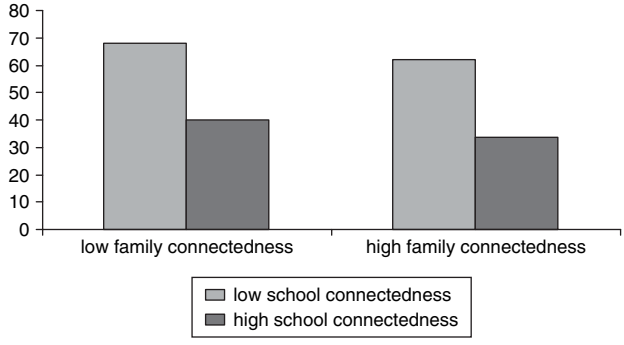
Micro-level factors: parents, schools, and peers—Young people often learn violent behavior from violent parents. Young Brazilians, Chileans, and Hondurans who are violent have higher levels of physical, psychological, and sexual abuse in their households than young people who are not violent. Young Chileans who feel a sense of family cohesion are 75 percent less likely to be violent than those who do not feel connected to their families (Cunningham and Bagby, forthcoming; ESA Consultores 2001; Koller et al. 2005). Young people in Honduras and Peru report that their family is a source of violence by teaching aggressive behavior for problem resolution (Dasso 2006; World Bank 2006k). Research from the United States has shown that this behavior is taught by families very early in the life cycle. Antisocial behavior has been identified in 6-year-old children who were arrested 12 years later for aggression (Lansford et al. 2002).

Schools can be a source of protection and may even counteract poor household influences. Young people in Brazil and the Caribbean who felt connected to their schools were half as likely to engage in violence as those who did not feel connected. Violent behavior can be reversed during the school years or it can be reinforced when young people have social difficulties in school that makes them become more violent (Dodge, Bates, and Pettit 1990). For example, the probability that Caribbean men ages 12 to 18 years who are not connected to family or school will engage in violence is 68 percent. If we factor in school connectedness, then the probability decreases to 40 percent. Conversely, if these young men did not have school connectedness but did feel a sense of closeness to their families, the probability would decrease only to 62 percent (see figure 6.4).

Sadly, though, schools in LAC can also teach violence. Qualitative data from the Caribbean show that corporal punishment in schools is common and that teachers and students are known to inflict violence on each other (World Bank 2003a). The incidence of physical, sexual, or psychological violence in the communities where violent young people live is also higher than those communities where youth violence is low.

Violence may be a way for young people to gain a sense of belonging. Among violent young Brazilians, 23 percent stated that they engaged in violent behavior to belong to a group (World Bank 2007b). Young people in the Dominican Republic and Nicaragua stated that they joined (drug) gangs to be part of a group, with a leader who cared about them (Luther, St. Ville, and Hasbun 2002; Maclure and Sotelo 2004). The

Figure 6.4. Probability of Male Violence in the Caribbean, by Degree of Connectedness



Source: World Bank 2003a.

Box 6.2

Lives of Juvenile Delinquents in Brazil

A study of 200 men ages 13 to 20 who had committed serious offenses and were incarcerated in Brazil revealed striking similarities in their backgrounds. All of the men came from very poor families, and their parents had very low levels of education. The young men started working at an early age, and most dropped out of school as a result. Most were working when they committed their first crime, at around 10 years old. They started by stealing and worked their way up to drug use (100 percent of the sample) and more serious crimes. They grew up in violent homes and communities and were repeatedly exposed to violence throughout their young lives. Many had witnessed the violent deaths of their fathers.

Source: Hutz and Silva 2003.

gangs gave them a sense of belonging that they were not getting at home or in school.

Young people from poor families are more likely to be violent than those from better-off families (see box 6.2). Although the Brazilian sample drew only from poor neighborhoods, the poorest of the sample were those who were more likely to engage in violent behavior (World Bank 2007b). Similarly, young people from poorer families in Colombia are more likely to be violent (Duque, Klevens, and Ramirez 2003). Also, juvenile crime has been correlated with local unemployment and poverty in the United States (Grogger 1998; Mocan and Rees 1999). Honduras reveals a different pattern, though, where young people from nonpoor households (proxied by their mother's education level) are three times more likely to be involved in gangs than young people with less educated mothers (ESA Consultores 2001).

Crime is linked to poverty in a number of ways. First, among those living in the most crime-prone areas of a country, the poor are most likely to be victimized by violent crime. Consequently, they suffer both the direct costs of crime and the indirect effect of living in a climate of fear. Second, the poor suffer from the phenomenon known as "area stigma." Many of the poor live in inner-city neighborhoods where crime is endemic. Residents of such communities, who themselves face the threat of criminal victimization, are perceived as criminals because of where they live and suffer from discrimination as a result (World Bank 2007a).

Macro-level factors: laws and social norms—Laws may be responsible for some youth violence. In particular, the age at which juveniles should be treated as adults by the legal system introduces perverse incentives to commit crimes when young because juveniles tend to receive less severe punishments than adults for the same crime. Thus, there is a concern that by lowering the age at which young people can be prosecuted as adults encourages adults to use even younger people in criminal tasks, mostly in the drug trade.

Violence is learned in accordance with social standards and norms. In settings where violence is tolerated or even valued, children grow up to see it as an acceptable response to a variety of circumstances. For instance, the recent ACTIVA survey of cultural norms and attitudes toward violence in select cities of Latin America and Spain found a significant relationship between attitudes supporting violence and use of aggression and violence among young people (Orpinas 1999). Social norms can be used to justify violence; many countries in LAC condone the use of corporal punishment in schools, and the severe punishment of children is seen as not only appropriate but required (World Bank 2003a). This is in spite of research suggesting that corporal punishment increases the likelihood of childhood aggression and violence (Guerra 2006).

Masculinity or "being male" is often associated with a willingness to use aggression and violence. Across the world, male aggression is an expected and approved way to demonstrate masculinity (Bannon and Correia 2006). Guns are often seen as a sign of respect. Slogans such as "no gun, no girl" are becoming increasingly popular among the most disenfranchised young males, and the concept of manhood ("go on like a man") is associated with having a lot of women and using violence (Guerra 2006; McAlister 1998; World Bank 2003a, 2006g). This does not affect women's view of their own femininity, however, and thus, in contrast, female crime and violence rates are low relative to males.

Income inequality, not overall poverty, leads to greater violence. Countries that have greater income inequality also have higher crime rates. Observing and living with income disparities is more difficult than absolute poverty, where everyone is deprived to an equal extent. This relative deprivation is correlated with higher homicide rates across the LAC region—which is both the most unequal and most violent region in the world (other than countries experiencing civil war) but is not the poorest region (Fajnzylber, Lederman, and Loayza 2002). At-risk youth, who tend to come from poor socioeconomic backgrounds in the unequal economies in LAC, are most likely to engage in violent behavior and criminal activity.

Individual-level factors: mental health—A low occurrence of youth violence is associated with good mental health. Young Caribbean men and women who are violent tend to be angry and to have regular thoughts of hurting or killing someone, compared with youth who are not in gangs or do not regularly carry weapons (Blum and Ireland 2004; World Bank 2003a). Young Colombians report a similar correlation between "feeling like losing their temper" and delinquency (Brook et al. 2003). Similarly, young people in Brazil who claim that they have low self-esteem are 60 percent more likely to be violent than those with a sense of well-being. This may be related to the positive correlation between feeling discriminated against and violence, despite the absence of a correlation between race and violence in poor Brazilian neighborhoods (World Bank 2007b).

Behaviors and outcomes: alcohol as a factor for violent behavior—Harmful alcohol use is a risk factor for being both a victim and a perpetrator of youth violence. Among the 10- to 18-year-olds participating in the Caribbean Youth Survey, having used alcohol in the previous year was significantly associated with engaging in weapon-related violence for both males and females. For both sexes, gang involvement is associated with higher levels of alcohol use (Ohene, Ireland, and Blum 2005).

Alcohol use is thought to increase youth violence through several channels (WHO 2003a). At the individual level, it can reduce self-control and the ability to process incoming information and assess risks. It can also increase emotional liability and impulsivity and, thus, make certain drinkers more likely to resort to violence in confrontation. Similarly, reduced physical control and ability to recognize warning signs in potentially dangerous situations can make some drinkers easy targets. Further, experiencing or witnessing violence can lead to harmful use of alcohol as a way of coping or self-medicating, while uncomfortable, crowded, and poorly managed drinking venues contribute to increased aggression among drinkers. At the micro level, alcohol and violence can be linked ritualistically as part of youth gang cultures. Further, hazardous and harmful levels of alcohol use are key risk factor for intimate partner violence.

Substance Use

The wide social acceptance of alcohol and tobacco use in LAC and the recreational nature of some illegal drugs (such as marijuana) blur the line between socially acceptable and socially irresponsible use of drugs. Given that research has shown that cigarette smoking is a gateway to the

use of illegal drugs, and given the dangers in the early use of any of these substances, particularly as the brain is still developing, smoking is still a source of concern. If we take as given the social acceptance of using alcohol, tobacco, and some illegal drugs, then why do some young people use these substances and others do not?

Micro-level factors: family, schools, and peers—Those who use alcohol, tobacco, or illegal drugs feel less connected to their parents, schools, or local institutions. In Argentina, the Caribbean, Colombia, Honduras, and Mexico, drug users feel less connected to their parents than do those who do not use drugs (Blum 2002; Cunningham and Bagby, forthcoming; ESA Consultores 2001; Koller et al. 2005). Schools can counterbalance this effect. Brazilian, Caribbean, and Mexican young people with strong school connections are less likely to use drugs. For example, young Mexicans who do not use drugs are 50 percent more connected to their schools than are drug users, after controlling for household characteristics, age, levels of exclusion, and poverty (Cunningham and Bagby, forthcoming).

Drug use is also a self-destructive response to difficult family and community conditions. Young drug users in Brazil, the Caribbean, Colombia, and Honduras report having been the victims of domestic violence and living in dangerous communities. And in the Caribbean and Colombia, young people report that their parents abuse these substances as well. Thus, youth may be using drugs and alcohol to escape reality or mimic parental behavior (Blum 2002; Brook et al. 2001; ESA Consultores 2001; Koller et al. 2005).

Drugs users tend to feel excluded from social groups. Young people in the Caribbean and Mexico who use alcohol and drugs report greater feelings of social exclusion (25 to 35 percent in Mexico) than those who do not use (Blum 2002; Cunningham and Bagby, forthcoming). Brazilians who use drugs have fewer friends, perhaps related to the sadness they have expressed (see table 6.6), while those in Colombia and Honduras say that they use drugs to fit in with peers (Brook et al. 2002; ESA Consultores 2001).

Macro-level factors: social norms, gender, and region—Social norms encourage drug use across the LAC region. The available evidence suggests that there is a widespread social acceptance of alcohol in nearly all Caribbean countries and of marijuana in some, both among in-school and out-of-school young people (Barker 1995). In Jamaica, in a 2005 school-based survey of 10- to 15-year-olds, almost three-quarters of

Table 6.6. Reasons That Brazilians Ages 14–24 Living in Poor Neighborhoods Use Alcohol and Drugs
(*percentages*)

Don't know	20.1
Fun/cool	9.4
Sadness or to forget problems	7.2
To feel free	5.0
My friends use drugs	2.4
It is easy to get	1.6
To feel stronger or braver	1.3
Other	9.2

Source: World Bank 2007b.

them reported that alcohol and cigarettes are easily obtainable (MEASURE Program 2007a). In the Dominican Republic, alcohol is very accessible and is by far the drug most widely consumed by youth. According to a recent survey conducted among secondary school students, 81 percent had consumed alcohol at some point in their lives, while 85 percent had had the opportunity to consume it. A separate survey of youth across the world found the mean age of young people the first time they consumed alcohol to be 13 years (World Bank 2006a).

The propensity to use, and abuse, drugs is higher among men than women. Men may have greater social pressures to use drugs as a means of showing their masculinity, but drugs are not linked to the sexual identity of women.

Urban dwellers have higher drug use, although the issue of urban versus rural residence was tested only in Mexico. Urban youth are 70 percent more likely to use drugs and alcohol than their rural counterparts, which may be because drugs are more readily available in urban areas (Cunningham and Bagby, forthcoming). The reason for greater alcohol use is less clear, but it may reflect the increase in binge drinking that was discussed in chapter 5. The correlation between ethnicity and drug use was tested in Brazil and, but ethnicity did not emerge as an important explanatory factor (Cunningham and Bagby, forthcoming; Koller et al. 2005).

Individual-level factors: fitting in, coping—Drugs are a coping strategy for those struggling with mental health challenges. Young people in Brazil, the Caribbean, and Colombia who use alcohol and drugs have higher levels of rage than do those who do not use these substances

(Blum 2002; Brook et al. 2002; Koller et al. 2005). Brazilian drug users have lower self-esteem than nonusers and have a greater sense of pessimism. As reported in table 6.6, young Brazilians report using drugs to feel free, braver, or less sad. Young Mexicans who use alcohol and tobacco cite social exclusion as the reason why they do so (Cunningham and Bagby, forthcoming).

Key Factors Correlated with Risky Behaviors

It is not possible to identify which factor is the most important in young people's decisions to engage in each kind of risky behavior. However, we can identify a small set of factors that recur in the analysis. Because each factor affects many different kinds of behavior, selecting interventions to influence these factors may be a cost-effective way to alter many different behaviors.

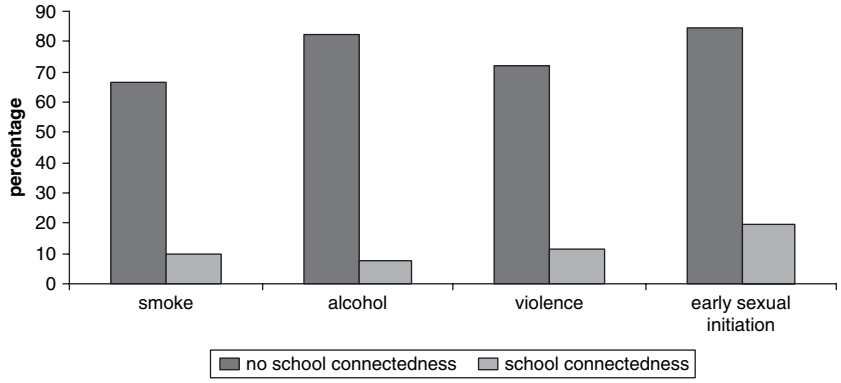
School Connectedness

School connectedness emerges as an explanatory factor for all five behaviors discussed in this chapter and, some argue, is the most important factor affecting these behaviors. It repeatedly emerges as a protective factor in all countries studied in this chapter. This concept is measured by young people feeling that someone in their school—a teacher, counselor, or nurse—cares about their well-being.

School connectedness is particularly strong as a behavior-related factor in the Caribbean. As shown in figure 6.5, young people in the Caribbean who feel a sense of connectedness with their schools are more than 50 percentage points less likely to smoke, use alcohol, be violent, or initiate sexual activity at a young age, after controlling for age and gender. Again, this is not just the simple fact of attending school, as all of the young people in the Caribbean sample were in school. Instead, it is the feeling that someone at school cares.

Although the negative correlations between school connectedness and risky behaviors are strong, we cannot claim causality. High school connectedness may be related to other underlying factors, such as optimism or a good family life, that decrease the incidence of these kinds of behavior. However, when all of these variables were controlled and only school connectedness was allowed to vary, the strong correlations remained (Cunningham and Bagby, forthcoming). This does not prove that school connectedness mitigates risky behaviors, but it does give a stronger suggestion that this variable is important.

Figure 6.5. Probability That a Young Caribbean Male Will Engage in Risky Behavior, by Level of School Connectedness



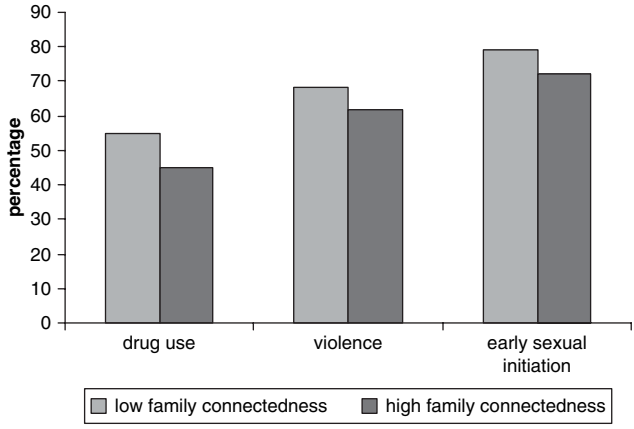
Source: World Bank 2003a.

Parental Connectedness

The feeling of being connected to a parent who cares emerged as an important influence in all five kinds of risky behaviors that are discussed in this report. Young people who feel a connection with their parents stay in school longer, do not go to work early (or if they do, they also stay in school), initiate sex at a later age and use precautions, are less likely to use drugs and alcohol, and are less violent than those who do not have this emotional connection to their parents. The emotional connection—not just the presence of a parent—is responsible for the less risky behavior. Although young people who live with both parents engage in fewer risky kinds of behavior than those who live with one or no parents, after controlling for the living situation, young people who participate in activities with their parents, who feel that they can talk to their parents, or who feel a sense of closeness to their parents are less likely to engage in risky behaviors than those who do not have these connections (Cunningham and Bagby, forthcoming).

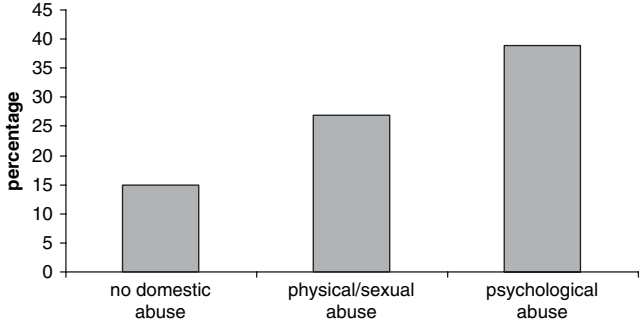
Figures 6.6 and 6.7 illustrate the role played by parents in a range of different kinds of risky youth behaviors. For example, figure 6.6 shows that 55 percent of young Caribbean men who do not feel connected to their parents are drug users, compared with 45 percent of those who have a strong family connection (after controlling for age, gender, and connections to schools or other adults). Similarly, young Caribbean men who feel connected to their parents are 6 percentage points less likely to engage in violence, and 8 percent less likely to initiate sex at an early

Figure 6.6. Probability That a Young Caribbean Male Will Use Drugs, Engage in Violent Activity, and Initiate Sexual Activity at a Young Age, by Level of Parental Connectedness



Source: Blum 2003a.

Figure 6.7. Probability That a Young Brazilian Will Engage in Violence, by Level of Household Violence



Source: World Bank 2007b.

age. Conversely, in Brazil, for example (figure 6.7), young people from households where there is domestic abuse have a higher propensity for violence than those who do not have these experiences with their parents.

Parental connectedness is so important that some research suggests that it can compensate for other negative factors. For example, young Colombians who could easily obtain drugs and who had a low sense of

self-esteem were marijuana users, but those who also had a strong bond with a parent were not (Brook et al. 2002). And parental connectedness may act as a buffer against the effects of drug availability, physical or psychological abuse, and stress on young people. Other research in the United States suggests that the parent-child bond has a larger positive impact on youth behavior than the negative impact caused by domestic violence (Goleman 2005).

When parental connectedness is absent, a feeling of connection with other adults can partly compensate. Blum (2002) shows this for various kinds of behavior among young people in the Caribbean, where a feeling of connection to another adult is also correlated with lower engagement in risky behavior. And Cunningham and Bagby (forthcoming) show that in Chile and Mexico, young people who come from negative family backgrounds but have a strong sense of connection with other adults engage in fewer kinds of risky behavior than those who do not have a nonfamily adult to care about them.

Household Poverty

Household poverty is a perhaps the strongest and most consistent correlate of risky behavior for all of the countries studied. Only alcohol use was not correlated with poverty for all countries, but this may be a result of the widespread social acceptance of drinking alcohol, which cuts across class.

In some cases, we can claim that household poverty is a direct factor affecting youth behavior. For example, both early school leaving and labor force entry increase when a parent loses a job. And a parent starting his or her own firm has an even stronger effect on young people's school attendance and labor force entry patterns (Cunningham and Maloney, forthcoming). Furthermore, the evidence from conditional cash transfer programs is that alleviating household poverty increases school attendance, may decrease child employment, and may even decrease risky and early sexual initiation (although this may be a result of higher school attendance). Notably, macroeconomic fluctuations alone are not sufficient to cause a change in young people's behavior. Instead, it is when the macroeconomic slowdowns trickle down to the level of the household and the members feel the effects of poverty that the changes in young people's behavior are manifested.

In other cases, such as the link between poverty, crime and violence, or substance abuse, the causal relationship is less clear. Poverty and the frustration with living in a society with high inequality may lead to greater violence or substance abuse, or there may be other correlates to explain the relationship.

This information has two policy uses. First, by alleviating household poverty, as Mexico's O*portunidades* or Colombia's *Familias en Acción* have done, it may be possible to change behavior. In fact, a program in Bangladesh used cash transfers as an incentive to lower adolescent pregnancy and marriage (World Bank 2006a). Second, poverty status can be a useful indicator for targeting programs to those most likely to engage in risky behavior.

Gender

Being male is a bigger risk factor for some kinds of behavior, while being female is more risky for others. For all of the kinds of risky behavior considered in this report, being male was the strongest correlate with engaging in risky behavior in Brazil, Chile, and Mexico. Males are more likely to drop out of school, enter the workforce early, engage in violent behavior, and use substances. Dropping out of school and early employment may be connected, as young males are much more likely to hold a paying job than females. Young girls, on the other hand, may be better able to balance their heavy workloads at home and at school (Knaul 2001). Nonetheless, girls cite "family responsibilities" as a main reason for leaving school.

The male propensity for violence and drugs may be part of a search for identity. The culture of *machismo* that still permeates the region can be dangerous to both young men and women. As stated in a well-known Brazilian movie, "You are not a man, you have not killed anyone." This may be an extreme sentiment, but it points to a culture where risky behavior is glorified (Barker 2006).

Girls may also be searching for a sense of gender identity. Girls in gangs are more sexually active and aggressive and are more likely to be substance users than girls who are not in gangs. Early and risky sexual activity and early marriage are ways to connect with other people and to have more status in society. Many young girls from poor neighborhoods across the region have given as their reason for having a child at a young age the desire to be treated as a woman, and thus occupy that role in society.

Laws

Some laws have a disproportionate effect on young people's risky behavior. Specifically, labor legislation limits youth employment and contributes to joblessness, as do maternity laws that limit young women's participation in the labor force. An absence of legislation protecting the rights

of adolescent mothers causes them to have to drop out of school to take care of themselves while pregnant or take care of their children. On the other hand, laws can have a positive effect on risky behavior. For example, laws that limit the location and hours of tobacco and alcohol sales reduce use of these substances by young people more than that of adults.

Mental Health

Mental health, manifested through feelings of inclusion, is correlated with all five kinds of risky behavior considered in the study. Young people who feel part of their community, who have friends, and who do not feel alone have a lower incidence of engaging in risky behavior. This is clearly related to the parental and school connectedness discussed above, but it reaches a wider group. Of course, the wrong kind of inclusion, as in gangs, increases negative behavior, but in other circumstances, social inclusion is a protective factor.

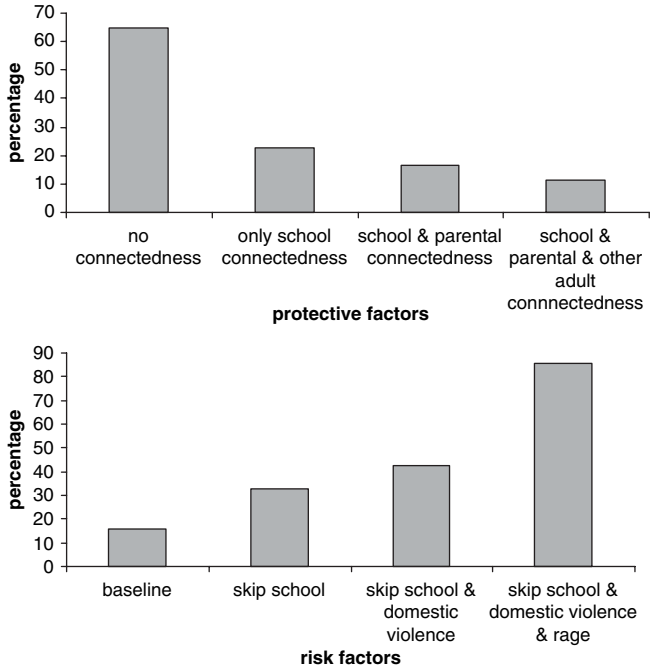
Further, evidence from the English-speaking Caribbean shows that rage is a key factor underlying all types of risky behavior, ranging from violence to sexual activity to drug use. Those young people who did not regularly feel rage—defined in the study as having a strong desire to hurt or kill someone—had a much lower incidence of any risky behavior than did their angrier counterparts (Blum 2002).

Cumulative Effect of Factors

Although each of the factors discussed in this chapter can increase risk or protect against it on their own, they are, in fact, cumulative in nature. As the number of protective factors in a young person's life increases, his or her risky behavior declines. For example, figure 6.8 shows that 64.6 percent of 16- to 18-year-olds in the Caribbean who have little sense of connection with their family, with other adults, or with school are drug users. If young people feel very connected with someone at school but have a low level of family and other adult connections, drug use falls to 22.9 percent. Adding a parental connection decreases drug use to 16 percent, and adding a connection to other adults reduces the use of drugs to 11 percent.[12]

Unfortunately, risk factors are cumulative as well. Figure 6.8 shows that an average of 12 percent of people ages 16 to 18 in the Caribbean use drugs. This increases to 32 percent after holding everything else constant except for "skipping school"—a proxy for poor school connectedness. If we add

Figure 6.8. Probability That a 16- to 18-Year-Old in the Caribbean Will Use Drugs



Source: World Bank 2003a.

the effect of domestic violence—a proxy for parental connectedness—drug use increases to 43 percent. Finally, rage, the very strong individual risk factor, increases the probability of drug use to more than 80 percent.

If a young person has a mix of risk and protective factors, the protective factors may be able to counterbalance the risk factors. Young Hondurans require a combination of school and parental connectedness to avoid risky behavior. The incidence of adolescent pregnancy, early school leaving, and inactivity is lowest among young people who work hard at school and who have a parent who spends time with them. They also have a lower incidence of drug use or violence (ESA Consultores 2001). The goal is to build up many protective factors in a young person's life, while at the same time minimizing the risk factors.

Conclusions

A host of individual, household, community, and macro factors affect the way in which young people form their preferences and make their

decisions. Although policy makers have been targeting some of these factors—such as school access or poverty—the role played by the young person's family and immediate community has so far been less central to policy.

This chapter identifies six key factors that underlie all of the risky behaviors discussed in this report and that should be the focus of policy. First, being in school and feeling a positive emotional connection to school is one of the strongest protective factors for a range of risky behaviors. Second, having an emotional connection to a parent or another adult also is strongly correlated with less risky behavior. Third, household poverty is key; policy makers already recognize this and are implementing large-scale programs to reduce poverty. Fourth, gender roles—those mysterious rules of society that are so important when young people are forming their identities—are a key factor. Fifth, laws can encourage or discourage risky behaviors, even if the laws are not specifically designed to affect youth behavior. Finally, good mental health—feelings of inclusion and controlling rage—protects against participation in all types of risky behaviors.

The chapter also demonstrates that risk and protective factors are cumulative, meaning that young people with many risk factors in their lives will engage in more kinds of risky behavior than a person with only one risk factor. However, accumulating protective factors is a powerful way to counterbalance this negative influence.

It should be mentioned that to date, the research has not proven a causal relationship between parental disconnectedness or school disconnectedness and risky behavior. However, the recurring correlation strongly suggests that eliminating the risk factors, while building up the protective factors, should be the focus of good policy for youth.

Notes

1. World Bank (2006a) argues that the gap in school attendance and learning between rich and poor students may have more to do with factors correlated with income, such as school readiness or access to school facilities, than with budget constraints on school attendance. This section reports only on the changes in school attendance when household budget constraints are loosened (via cash transfer programs) or tightened (via negative economic shocks to the household).
2. Duryea, Edwards, and Ureta (2003) and Cunningham and Maloney (forthcoming) find that a higher level of wages or an increase in wages of the unskilled is negatively correlated with school attendance.

3. The general economic environment does not negatively affect school attendance (Cunningham and Maloney forthcoming; Duryea, Edwards, and Ureta 2003). Instead, it may actually have a *positive* effect, as was found by Schady (2006) for Peru, perhaps because the opportunity costs of schooling decline during economic downturns.
4. This estimate controls for parental education, rural/urban location, child characteristics, and school characteristics (Gunnarsson, Orazem, and Sanchez 2006).
5. These results are derived from regression analysis after controlling for age, gender, poverty level, ethnicity, and rural/urban factors (Cunningham and Bagby, forthcoming).
6. The correlation is not statistically different from 0 at the 5 percent level (ESA Consultores 2001).
7. Within the region, there are considerable disparities both among and within countries regarding birth registration. Chile (95 percent) and Cuba (99 percent) can boast of nearly universal registration, but the Dominican Republic (75 percent) and Haiti (70 percent) are still a long way from achieving this goal. In Colombia, where overall birth registration exceeds 91 percent, trend differences within the country reflect the existing disparities. For example, the registration rate of the urban population is 95 percent, but only 84 percent of those living in rural areas are registered.
8. This statistic was estimated in a (logistic) regression, which controlled for optimism and poverty level.
9. The LAC average is below the Middle East and North Africa and Sub-Saharan Africa because the Caribbean has less rigid labor markets than Latin America (Heckman and Pages 2004), thus pulling down the regional average.
10. Duryea, Lam, and Levison (2007) found that macroeconomic fluctuations in Brazil did not cause young people to enter the labor force, and Schady (2002) actually found that youth employment decreases during economic downturns as a result of the lower opportunity cost of schooling. Cunningham and Maloney (forthcoming) also found that the business cycle fluctuations in Argentina and Mexico were not statistically correlated with labor force entry by 12- to 24-year-olds or by young people from the poorest families. Instead, the trends observed in Figure 6.3 are picking up the response to an increase in household poverty via parental job loss, which is correlated with the macroeconomic downturns. Thus, macroeconomic fluctuations that are not accompanied by adult unemployment will not affect youth employment, but if adult employment is affected, young people will also start to look for jobs.
11. In Honduras, 26.6 percent of women who had adolescent pregnancies also experienced household violence, compared with 15 percent of those who

lived in nonviolent households. Similarly, 21 percent of women who were not connected with their parents had been pregnant, compared with only 2.6 percent of those who were connected. However, the correlation between the risk factor and adolescent pregnancy is not significant at the 5 percent level.

12. The order in which the factors are entered determines the size of the decrease in the behavior between steps. If parental connectedness is entered first, drug use declines from 64.6 to 38.3 percent, a drop of 26 percentage points, compared with the 6 percentage point drop shown in the figure, while school connectedness contributes 13 percentage points, rather than the 42 percentage points shown in the figure. This fact points to the multitude of underlying factors that prompt these kinds of behavior.

SECTION III

Helping Young People Make Good Choices: Programming, Policy, and Implementation

This section discusses how to build an effective portfolio for at-risk youth in LAC. Chapter 7 provides a set of underlying principles to guide policy makers, communities, and parents/caregivers in designing and executing a portfolio to help at-risk youth return to a path of positive personal development.

Chapter 8 recommends a core set of concrete policies and programs for LAC policy makers based on the principles described in Chapter 7 and the most up-to-date scientific evidence. These recommendations take into account the need for a portfolio that both prevents risky behavior from occurring and provides second chances and treatment for young people who are already suffering the negative consequences of risky behavior. The recommendations are divided into three categories:

- *Core policies*. There is broad consensus among youth development experts on which factors affect multiple kinds of risky behavior and which, therefore, should form the base of any country's youth portfolio. We recommend these policies for widespread implementation on a large scale. Although the type of risk that these programs target was not a criterion for selection, all the programs that are included in this category happen to focus on programs and policies that prevent

disadvantaged young people from becoming at risk in the first place (type I risk).

- *Promising approaches*. These approaches have not been as widely evaluated in the LAC context as the core policies have, but there is sufficient evidence from elsewhere in the world to merit recommending them. Again, although the risk type was not a criterion for selection, the programs selected focus primarily on young people who are already at higher levels of risk (types II and III risk) and would benefit from second-chance programs.
- *General policies with a disproportionate effect on youth at risk*. These policies address critical risk factors at the community and macro levels, and we recommend them as an essential part of any overall strategy to reduce the number of youth at risk. They encompass both prevention and second-chance programs and policies.

Chapter 9 focuses on moving from recommendations to action. First, it addresses the issue of resource constraints in building an effective portfolio for youth at risk. In particular, it focuses on reallocating resources away from policies and programs that have proven to be ineffective and toward more efficient and cost-effective programs. Second, it underscores the importance of creating information and proposes a series of monitoring indicators to track the progress that new policies make toward reducing the at-risk youth population. Third, it identifies the most appropriate actors for building an effective portfolio for youth at risk.

This section is further developed in the accompanying volume: *Supporting Youth at Risk: A Policy Toolkit for Middle-Income Countries* (Cunningham, et al. 2008)

CHAPTER 7

Principles for Building an Effective Portfolio for Youth at Risk

The findings of this report, combined with general lessons from around the world about youth development, have yielded a set of principles on which to base an effective investment portfolio for reducing and coping with at-risk youth in the LAC region. The purpose of this chapter is to highlight some principles that may help policy makers, practitioners, and communities to develop a more strategic approach toward addressing the challenges facing this population.

Investing in At-Risk Youth Leads to Lower Demands on the Public Purse in the Future

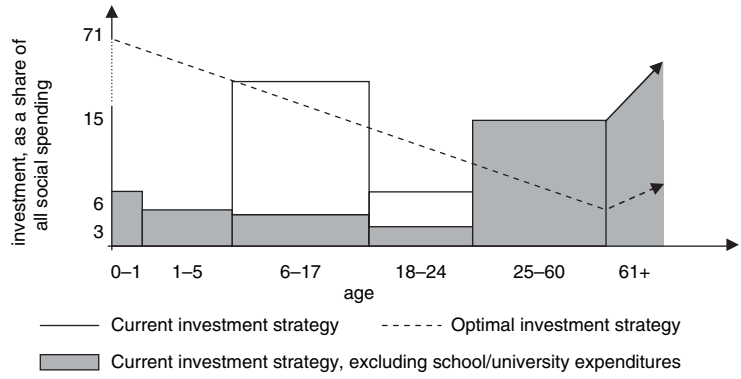
As demonstrated in chapter 2, negative outcomes from risky behavior by young people impose significant costs, both on the individual and on society. And as chapter 5 showed, the incidence of risky behavior among young people is high and even increasing in some cases. Preventing risky behaviors would improve young people's health status, increase their earnings potential, and give them more possibilities to enjoy life. It would also eliminate social costs, thus freeing up public resources for other initiatives and increasing growth, as people would have more human capital and thus greater productive capacity. This suggests that

investing in youth development is a necessary part of any country's investment strategy for economic and social development.

The observed pattern of how public investment is distributed throughout the life cycle suggests that governments are not maximizing the efficiency of their resources. For example, figure 7.1 presents federal expenditures in Brazil by age groups of the population. The lowest expenditure is for preschool children, precisely the age group for which investments yield the highest rates of return. Expenditures on young people are quite high, but this is largely from university funding, which rarely benefits at-risk youth. If university expenditures are eliminated, then spending on at-risk young people is very low. In contrast, public spending on the elderly is the highest, mainly as a result of pensions.

As argued throughout this book, this expenditure pattern ought to be reversed so that countries have an investment rather than a consumption strategy. The current pattern reflects low investment in the young, which in turn requires high investments in the older population who are not self-sufficient. The ideal would be to make heavy investments early in life, which should lead to a lower demand for investments later in the life cycle. These prevention measures are significantly less expensive than remedial or curative interventions, as suggested by the downward sloping dotted line in figure 7.1. For example, a public campaign to promote condom use to prevent the spread of HIV is significantly less expensive than the need for qualified physicians to administer antiretroviral drugs to those who have contracted HIV. As another example, a conditional cash

Figure 7.1. Optimal versus Actual Investments in Human Capital throughout the Life Cycle



Source: World Bank (2007b), using fiscal accounts from Brazil.

transfer program to prevent children and young people from dropping out of school is likely to be significantly less expensive than adult literacy programs to help early school leavers catch up on their schooling or to subsidize their pensions when they retire because they did not earn enough during their working years to save for old age.

Preventing Risky Behavior Begins at Birth

The most successful—and cost-effective—way to prevent risky behavior in youth is to start at birth.[1] To ensure the health and safety of the youth population of tomorrow, it is important to build the right environment today. As shown in chapter 6, policy makers should support the people and institutions that have the greatest influence over young people's behavior—the family, the community, and local schools and health centers—and enhance the services that are already being provided to these actors to reduce risk factors and enhance protective factors that are offered by each.[2] For young children this means early childhood development programs (for children from in utero to the age of 5) that build positive experiences and norms for children and teach their parents to do the same at home. ECD programs have had a positive impact on reducing all kinds of risky behavior in later years, ranging from reducing criminality and substance use to increasing educational attainment. For older children, effective programs include improving the quality of the school, increasing its safety, and strengthening students' feeling of belonging to the school, which, as shown in chapter 6, positively affects all kinds of risky behaviors.

At-Risk Youth Need Second Chances

Ideally, all children will enter their youth years with a full set of protective factors and no risk factors, which will discourage them from engaging in risky behavior. This, however, is an unrealistic expectation for two reasons. First, as shown in chapter 4, some young people with no observable risk factors still engage in risky behavior, albeit fewer than those who do have strong risk factors in their lives. Second, it is never possible to eliminate all risk factors from young people's lives, regardless of how well designed prevention programs may be. Whatever the causes of risky behavior—individual misjudgment, family decisions and behavior, market failures, or failed policies for delivering basic services—young people need and deserve a second chance to build their futures.

Thus, any strategy for addressing the problems of at-risk youth needs to include a sustainable system of second-chance programs. These programs help those individuals affected by their own behavior to return to a safe, productive path to adulthood. Young people in this category are difficult to reach because they have generally fallen out of the public system, which implies a range of unsatisfactory outcomes, from dropping out of school to being incarcerated. This means that the strategies needed to deal with their problems also need to be diverse, ranging from education equivalency and job training programs for school dropouts to targeted individual treatment for drug addicts or repeat criminal offenders.

The costs of such interventions can vary widely. Programs that target young people who have engaged in lower levels of risk—for example, education equivalency programs for school dropouts—can be relatively inexpensive. However, young people who are engaging in more risky behaviors often require individual attention to reverse behaviors, beliefs, and concepts that they were taught at a very young age by people and institutions that they trusted; this kind of program can be very expensive. Most governments do not provide enough of the services that address the more serious risks, and the expenditures that governments do make are often inefficient or ineffective, and in some cases can even be harmful to young people (for example, incarceration). Therefore, to be effective in terms of reintegrating at-risk youth into society, these kinds of programs have to be carefully targeted and designed according to the evidence of what works.

The most effective second-chance programs focus on young people's human development rather than punishing their risky behavior. For example, putting young people in prison will prevent them from committing violence in their communities in the immediate future, but it does not change the core beliefs and experiences that led them to prison in the first place. Instead, effective rehabilitation programs focus on changing the factors and conditions that are behind the young person's choice to engage in risky behavior.[3] Second-chance programs are not only more effective than incarceration and other get-tough strategies, but are also less costly, especially when the costs and benefits to society as well as to the individual are factored in.

Effective Targeting Is the Key to Results

Devising an effective strategy for reducing the number of at-risk youth requires more effort to ensure that the chosen interventions address the

specific needs of this subgroup of the youth population. To allocate scarce resources efficiently, policy makers need to target these resources to those most in need, using the most effective and accurate indicators to do so. At a minimum, this report recommends targeting prevention programs to young people from poor families or neighborhoods. Although poverty is not necessarily the cause of negative behavior, young people from poor neighborhoods disproportionately engage in these kinds of behavior, which makes poverty a useful targeting indicator. Similarly, to target second-chance programs, policy makers should start with school dropouts, who are likely to be engaging in other risky behaviors that are not easily observable, and offer them support that addresses more than just their educational needs.

Program designers should consider the cognitive and social abilities of the young person at each point during the life cycle. As we pointed out in the introductory chapter of this book, young people's cognitive abilities change dramatically over the adolescent years, so their ability to grasp abstract concepts will differ significantly by age. And young people begin engaging in different kinds of risky behavior at different ages. Also, chapter 2 suggested that young people may not fully understand or take into account the future costs of their current behavior—the implication being that policy makers need to design age-appropriate interventions.

The youth population is heterogeneous, and youth programs must reflect this heterogeneity. As discussed throughout this report, young people's needs differ by sex, age, race, ethnicity, urban/rural location, wealth, interests, and a multitude of other factors. Policy makers must account for these specific group differences.

The Most Effective Portfolio Will Prioritize Policies and Programs That Affect Multiple Risks

Chapter 6 showed that a core set of factors affect a variety of risky behaviors. This suggests that a separate intervention is not necessary for each kind of risky behavior. Instead, targeting these common factors can have positive effects on several kinds of behavior at once. For example, as noted earlier, investments in early childhood development have consistently had a positive impact not only on the nutritional status and educational achievement of primary school students, but also in reducing criminal activity, substance abuse, and risky sexual behavior in the youth years. Similarly, conditional cash transfer programs may be intended to encourage young people to stay in school, but they also reduce substance

use and violent behavior because they may foster a sense of connection to the school.

Many existing programs can be modified at marginal expense to address multiple risks at once. For example, education equivalency programs can be strengthened by adding training in life skills. By focusing on programs that aim to influence multiple kinds of behavior, the cost effectiveness of the whole portfolio can be increased.

Include Only Effective Policies in the Portfolio

Good public policy dictates that resources should be spent only on programs for which there is a high rate of return. There is enough research on the impact and (to a lesser extent) cost-benefit ratios of youth interventions around the world for policy makers to have a sound knowledge base from which to draw when designing a youth portfolio. The next chapter lays out the evidence and suggests a set of programs to form the base of a youth portfolio.

Notes

1. Carneiro and Heckman (2003) argue that the rates of return to programs decrease as age increases. Thus, early childhood programs have the highest returns, while second-chance programs in adulthood have the lowest rates of return.
2. The Strengthening America's Families Initiative, funded by the U.S. government's Office of Juvenile Justice and Delinquency Programs (OJJDP), found that the most effective programs for decreasing delinquency were those that started early, trained parents and caretakers in effective positive discipline, helped to improve parent-child communication, taught parents nonviolent coping skills, provided high-risk families with intensive and repeated family and youth interventions by professionals, encouraged weekly family meetings to change internal family dynamics and communication patterns, and tailored the program to the types of risks the family faced and to the development stage of the youth and parents targeted (Bilchik 1998).
3. For example, Colombia has two programs to address unemployment among poor populations. *Empleo en Acción* is a workfare program, providing a stipend in exchange for short-term work on public projects. Young people participate in this program but gain little besides an income for six months while performing unskilled labor. The *Jóvenes en Acción* program, on the other hand, provides them with job training, life skills management, internships, and general psychological and professional support. The publicly funded,

NGO-based programs operate in the young person's community and provide a holistic job-preparation program with intensive attention, follow-up, and support for the young person as he or she enters the working world. This model is expected to have long-term positive effects on the employability and future wages of young people.

CHAPTER 8

Prioritizing What Works

Thousands of youth programs exist across the world, but which are best suited to address the problems of at-risk youth in the LAC region? For the purposes of this book, policy makers, practitioners, and academics specializing in youth development and risky behavior were convened to weigh the evidence and identify the programs and policies that were best suited to LAC (see box 8.1).[1] These experts used the following criteria to select policies and programs:

- A clear impact on multiple kinds of risky behavior
- Proven to work for a sustained period of time
- An impact that has been supported by scientific evidence
- Potential to be replicated in LAC
- Cost effective

The standards of scientific evidence for this report have been classified into three categories recommended by the World Bank (2006a): (i) proven—sufficient evidence of program effectiveness (using either experimental or quasi-experimental evaluations) for us to recommend its widespread implementation, ideally with careful monitoring of coverage, quality, and cost; (ii) promising—evidence suggesting that these

Box 8.1

Methodology for Developing a Policy Toolkit for LAC Youth at Risk

A growing literature on youth at risk in both OECD and LAC countries provides a rich body of evidence from which to draw policy recommendations. As part of the preparation of this report, leading experts on youth from different disciplines—academics, policy makers, and practitioners from OECD and LAC—wrote policy notes recommending the top policies and programs for reducing risky outcomes in LAC based on evaluated evidence in each of five risk areas: early school leaving, youth unemployment and inactivity, risky sexual behavior, substance use and abuse, and crime and violence.

These policy notes focused on the subset of at-risk youth and made recommendations that were as LAC-specific as possible. The notes attempt to address a common set of program parameters that typically face any policy maker or practitioner:

- Target age group
- Target risk group
- Program costs
- Necessary initial conditions
- Anticipated outcomes
- Impact (including indirect impact on various risky behaviors)
- Considerations for sustainability and replicability
- Whether policy is proven, promising, or unproven

After completing the policy notes, the experts were brought together to identify a core set of policies and programs across disciplines that reduce multiple risk outcomes and are shown to work in LAC, or have been shown to be effective elsewhere and have the potential to work within an LAC context. Appendix 5 provides a complete list of the policy notes prepared for this exercise.

interventions are effective, but large-scale implementation must be accompanied by further evaluation and operations research to clarify their impact; and (iii) proven ineffective—sufficient evidence of a lack of effectiveness (or even harm) for us to recommend that they should not be pursued. These categories will be used to classify the programs presented in this report and to guide policy makers in making strategic decisions about their portfolios.

The results of the intensive effort with the experts are reflected in the following three sets of recommendations (appendix F provides a set of sources for evaluated policies and programs):[2]

- *Seven core policies* should form the basis of any portfolio for youth at risk. These policies have been proven to be effective in reducing risky youth behavior and the resulting negative outcomes. These policies are recommended for widespread implementation on a large scale. Although the risk type was not a criterion for selection, it turned out that all of these programs focus on targeted prevention of risky behavior (type I risk), demonstrating that most high-quality evaluations are for prevention programs.
- *Nine promising approaches* that have been proven effective in at least one LAC country or have had a repeated impact elsewhere should be considered for inclusion in the youth portfolio along with built-in impact evaluations. Again, although the risk type was not a criterion for selection, it turned out that all of the recommended approaches focus on youth who are already at higher levels of risk (types II and III risks), pointing to the scarcity of evaluation evidence for second-chance programs.
- *Seven general policies* that affect the whole population and are particularly effective at reducing risky behavior by young people are also recommended for inclusion in any youth portfolio.

These 23 policies and programs are among the best the world has to offer for at-risk youth in LAC. Nonetheless, several caveats must be acknowledged. First, there is very little data on the costs and benefits—or even the cost effectiveness—of alternative approaches to reducing risky behavior. Second, many programs evaluate a program's impact on only one or two kinds of behavior, whereas they may have an indirect impact on many others. For example, job training programs may reduce unemployment, but they may also reduce other risky behaviors such as substance use, delinquency, and violence. Third, consistency is a key component of the success of any program. Many originally successful strategies have been adopted elsewhere and failed because of an inability to stick to the key program elements. Finally, each country's context and institutional capacity will dictate both the relative balance of the portfolio and the country's ability to implement it. These caveats underscore the need for significant operations research as the evaluation aspect of the youth development field continues to develop.

These 23 policies and programs are discussed in the rest of this chapter. The specific programs within each set of recommendations are summarized in a table that begins each subsection. The programs that are most highly recommended are highlighted in gray in each table. Programs that have had no impact or a negative impact are discussed in chapter 9.

Core Policies: Strategies That Work and Are Recommended for Implementation

Portfolios for at-risk youth in LAC should include this core set of policies, all of which have a proven track record of reducing negative youth behavior and its damaging outcomes. Each policy outlined below affects several kinds of behavior and has had demonstrated success in the LAC context. These policies were selected according to the criteria described in box 8.1 and focus primarily on prevention of risky behavior (type I risk). Because many of these seven core policies and programs have been well documented elsewhere, they will only be summarized in this subsection (see table 8.1).[3]

Core Policy 1: Focus on the First Five Years of Life to Prevent Risky Behavior in Later Years

Investing in early childhood development (ECD) targeted to poor families is one of the most cost-effective ways to not only improve the education and health outcomes of children, but also reduce a wide range of risky behavior among adolescents. Empirical evidence from around the world clearly demonstrates that investing in high-quality ECD programs—including health care, nutrition supplementation, mental stimulation, pedagogical activities, and parenting training—has a powerful long-term impact on both improving human capital outcomes (education achievement, health, and nutrition status) and reducing risky behavior (crime, violence, domestic abuse, teen pregnancy, and substance abuse) (Grantham-McGregor et al. 2007; Schweinhart et al. 2005; UNESCO 2007; WHO 2003b; World Bank 2002, 2005a, 2006a). For example, the landmark Perry Preschool Study estimated the impact of an integrated ECD program on disadvantaged and high-risk children (ages 3 to 4) in the United States over 40 years (High/Scope Educational Research Foundation 1999). When the subjects were ages 27 and 40, the study found that the ECD interventions had had a remarkably sustained impact. Compared with the control group, adults who participated in the program committed far fewer crimes of all types, had higher earnings, had

Table 8.1. Summary of Core Policies

Policies and programs	*Target group (risk type)*	*Risks addressed (secondaryEvidence effects)*[a]	*(examples)*	*Factors for success*
1. Focus on the Early Years • Early childhood development	Poor communities; children ages 0–5 and their parents (type I)	1, 2, 3, 4, 5	Proven (Brazil, Chile, Colombia, Honduras, Jamaica, Mexico)	Incorporate health, nutrition, cognitive development, and parenting training. Evaluations to understand medium-term impact on risky behavior.
2. Keep Youth in School through Upper Secondary Completion	Universal (with targeted expansion to poor communities) (type I)	1, 2, 3, 4, 5	Proven (Brazil, Chile, Colombia, Mexico, OECD)	Improve quality and standardized measurement of quality (for example, Trends in International Math Science Study [TIMSS], PISA). CCTs for increased demand. Eliminate regulations requiring pregnant teens to drop out of school.
3. Use Captive Audience in Schools for Targeting			Proven (Brazil, Chile, Jamaica, Mexico, OECD, United States)	Offer HIV education, sex education, and life skills education; target risk prevention messages to appropriate ages, sexual experience, and culture; trained school-based diagnosticians with the ability to diagnose educational and health issues (eyesight, hearing, iron deficiency, substance use) combined with appropriate supply response mechanism, either school-based or in the public health care system.
• Sex education	Universal (grades 6–12)	3 (1)		
• Violence prevention		1, 3, 4, 5 (2)		
• School-based diagnostics and referrals	Youth with signs of risky behavior or obvious health handicaps in schools (types I and II)	1 (2, 3, 5)		
• Remedial education		1 (2, 3, 4, 5)		

(*continued*)

Table 8.1. Summary of Core Policies *(continued)*

Policies and programs	*Target group (risk type)*	*Risks addressed (secondaryEvidence effects)*[a]	*(examples)*	*Factors for success*
4. Improve Youth Services • Youth-friendly health and pharmaceutical services	Poor communities (types I, II, III)	3, 5 (1, 2)	Proven (developing countries in all regions)	Make pharmacies and clinics more available to youth Employ community outreach programs to raise demand for services and secure local support.
5. Use the Media to Communicate Prevention Messages for Youth	Youth-specific messages (types I, II, III)	3, 4, 5 (1,2)	Proven	Social marketing through television, radio, and print on HIV prevention, reproductive health, tobacco consumption, and prevention of violence (including domestic violence).
6. Improve Caregiving • Effective parenting training	Poor communities and families; poor youth before they become parents (types I, II, III)	1, 2, 3, 4, 5	Proven (United States) Promising (Jamaica, Mexico)	Start early in the child's life; include positive nutrition, parent-child communication, and discipline, nonviolent coping skills.
7. Collect and Analyze Data on Youth	Household and Demographic and Health Survey surveys; police and hospital records	1, 2, 3, 4, 5	Proven (Europe, United States) Promising (Brazil, Chile, Mexico)	Emphasis on risky behavior; employing new technologies helps to ensure privacy for responders.

Note: a. 1 – School Leaving; 2 – Youth Unemployment; 3 – Risky Sexual Behavior; 4 – Substance Use; 5 – Crime and Violence.

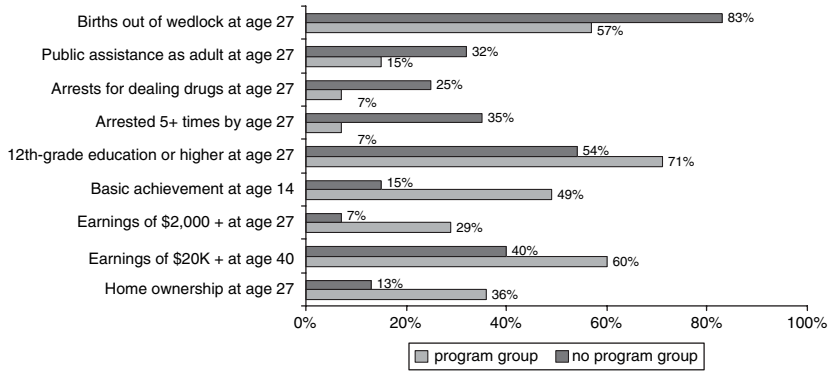
fewer births out of wedlock, had fewer arrests for drug dealing, and had higher rates of home ownership (see figure 8.1). A key message from global evaluations of ECD programs is the importance of providing effective parenting training to achieve these long-term goals, in particular reducing youth violence (Grantham-McGregor et al. 2007; UNESCO 2007; U.S. Surgeon General 2001; World Bank 2005f, 2006a, 2006d).

Researchers estimate that for every taxpayer dollar invested in this program, the return was more than $17 ($13 to society as a whole, and $4 to participants), with much of the return coming from a reduction in crime. These results have been confirmed by evaluations of other ECD programs that saw similar positive effects, particularly in terms of delinquency prevention (High/Scope Educational Research Foundation 1999; Karoly et al. 1998; World Bank 2002, 2005f). In LAC, similar findings on education, health, and behavior outcomes for children have been documented across a range of ECD programs (Grantham-McGregor et al. 2007). However, because this type of research began only over the past decade in LAC, it is only now that the impact of these ECD programs on young people and adults can begin to be properly measured.

Core Policy 2: Keep Youth in School through Completion of Secondary Education

As discussed in chapter 6, schools are such an important protective factor for youth that just getting poor children into school and keeping them there will have a significant impact on the at-risk population—not only on

Figure 8.1. Investing in Early Childhood Development to Reduce Risky Youth Behavior



Source: High/Scope Educational Research Foundation 1999; http://www.highscope.org/research/Perry% 20fact%20sheet.htm. Schweinhart 2004.

their educational outcomes, but also on reducing nearly all kinds of risky behavior. When combined with improvements in overall school quality, ensuring that young people stay in school until they complete upper secondary education is perhaps the most important preventive investment a country can make in at-risk youth. Policy makers should focus investments particularly on poorer communities, which stand to gain more in terms of both human capital *and* reducing risky behavior, as discussed in chapter 4.

Examples of policies to improve the quality and increase the relevance of schools include (i) incentives, training, and materials to increase the effectiveness of teachers, administrators, and sector governance at both central and local levels; (ii) a broader, more diversified curriculum emphasizing knowledge-intensive and information-intensive skills, including relevant and meaningful certification and accreditation related to job market entry and further educational opportunities; (iii) a system of evaluation and quality assurance that emphasizes the impact of schooling on students' broader well-being and employability, and not just on whether they graduate (World Bank 2006e); (iv) academic support for poor and talented secondary school students who may be frustrated with the curriculum; and (v) school-based career counseling to clarify the relevance of the school experience for future job success.

Of particular importance to poor families is the need to address the opportunity costs to families of young people staying in school rather than contributing to their family's (or their own) income. Recent evidence from evaluations of conditional cash transfer programs targeted to the poor in Colombia and Mexico indicates that making small monetary transfers to families is an effective way to encourage disadvantaged young people to complete their secondary schooling, and such transfers are even more effective for young people ages 12 to 18 than for younger children (Attanasios, Meghir, and Santiago 2005; Barrera-Osorio et al., forthcoming; Behrman Parker, and Todd 2005a; Parker 2006). Another important factor is to eliminate school policies that force pregnant girls to drop out of school. However, in some countries, even when the policy is eliminated, the practice continues, pointing to the need for a corresponding effort to monitor and enforce the norm.

Core Policy 3: Use the Captive Audience in Schools to Provide Key Risk Prevention Messages and to Identify At-Risk Youth in Need of Remedial Support

Evidence from program evaluations indicates that the most successful school-level interventions for reducing risky behavior are (i) universal

curriculum-based *HIV and sex education* in all schools to increase reproductive health knowledge and reduce risky sexual behavior (Blum and Sudhinaraset 2006; Kirby, Laris, and Rolleri 2006; WHO 2006a); (ii) *life skills training* at the secondary level providing self-management skills and social skills, as well as information related specifically to gateway drug use, including tobacco, alcohol, and marijuana;[4] (iii) *violence prevention* programs (Gottfredson, Wilson, and Najaka 1995; and (iv) *screening services* to identify students who have vision, hearing, learning, substance abuse, HIV/AIDS, and other health problems, and a referral system to address the problem (Arends-Kuenning, Ferro, and Levison 2006; PAHO 2007).

A key factor in the success of these risk prevention programs is that they are targeted to young people according to their ages, sexual experience, and culture. For example, evaluations of the most widely implemented youth drug prevention program in the United States showed that it had had little or no deterrent effect on substance use (U.S. Surgeon General 2001; Washington State Institute for Public Policy 1998). Researchers have suggested that it was targeted to students at too young an age (grades 5 and 6) and that it is harder to teach children who have not gone through puberty how to deal with peer pressure to use drugs that they will encounter only in higher grades (U.S. Surgeon General 2001).

Core Policy 4: Make Health and Pharmaceutical Services More Responsive to the Specific Needs of Young People, Especially Those from Underserved Communities

Interventions that have been shown to be particularly effective in increasing young people's use of health services in a wide range of developing countries include (i) training service providers and other clinic/pharmaceutical staff in youth-friendly practices; (ii) making clinics and pharmacies more accessible and acceptable to young people (for example, by investing in mobile units to take health services to poor and rural areas); and (iii) using community-based youth outreach and information activities to generate both demand and community support for health services for youth (WHO 2006a). These interventions can reduce not only risky sexual behavior, but also interpersonal and domestic violence.

Core Policy 5: Use Media at the Local and National Levels to Increase Young People's Exposure to Specific Social Marketing Messages and to Reduce Their Exposure to Negative Behaviors

Young people of all income levels are particularly susceptible to the media. As a result, interventions that deliver certain social marketing

messages via a combination of radio, television, print, and other media have proven to be effective in (i) reducing risky sexual behavior through HIV prevention and reproductive health messages, especially if combined with increased availability of condoms and other health services for youth (WHO 2006a); (ii) reducing tobacco consumption (for example, the national "truth" antismoking campaign, which accounted for a significant portion of the decline in U.S. teen smoking from 25.3 percent to 18 percent between 1999 and 2002 [Farrelly et al. 2005]); and (iii) reducing violent behavior, particularly against women, for example, through television shows.

Core Policy 6: Make Effective Parenting a Cornerstone of All Youth at Risk Prevention Policies and Programs

Investing in effective parenting training programs that target poor families is one of the most cost-effective ways to prevent risky behavior. Family-based parenting training that promotes healthy, protective parent-child interactions have significantly reduced domestic violence, association with delinquent peers, use of alcohol and other substances, school dropout, and arrests (Greenwood et al. 1998; U.S. Surgeon General 2001; WHO 2002). Evaluations of a range of parenting programs to prevent youth violence across the United States (Bilchik 1998; Mihalic et al. 2004) have shown that to be effective, family-based interventions need to (i) start as early as possible (even targeting young people who are not yet parents), (ii) train parents and caretakers in positive discipline methods in addition to standard health and nutrition practices, (iii) improve parent-child communication, (iv) teach parents nonviolent coping skills, (v) provide high-risk families with intensive and repeated family and youth interventions by professionals, and (vi) encourage weekly family meetings to change internal family dynamics and communication patterns tailored to the types of risks that the family faces and to the development stage of the young people involved.

Core Policy 7: Invest in Gathering and Analyzing Accurate Youth Indicators, with Particular Emphasis on Youth at Risk

The first step in identifying appropriate policies in any given country is to determine which risky behaviors are the most problematic and to identify those who are engaged in them. Youth surveys and databases are notoriously weak or nonexistent in most developing countries, and there is often little consensus among the youth development community about which indicators are best for monitoring issues related to this

population group. Accurate indicators are critical for establishing priorities and for developing a body of evidence about which interventions work and which do not and in what circumstances—all of which advance policy in a cost-effective way.

Appendix D lists a core set of indicators that constitutes the minimum that each country needs to collect to identify the main issues confronting young people and, in some cases, to serve as an "early warning" of key problems affecting youth at risk. In addition to standard education, health, and poverty indicators, these include data from official arrest records (on criminal and violent acts), victimization surveys, and public health data about emergency room visits. The key is that the databases need to be linked across sectoral departments, and responsible ministries need to understand the importance of breaking down the information by age to understand the disproportionate prevalence of risk during youth.

Nine Promising Approaches That Ought to Work and Should Be Tried, Accompanied by Careful Impact Evaluation

The core policies in the previous section were selected based on our knowledge of what works across a wide range of contexts. The approaches that we recommend in this section are based on less convincing evidence. These policies and programs have not been as widely evaluated, especially in the LAC context, but existing information suggests that they are worth pursuing. They have either been proven in at least one LAC country or have repeatedly been shown to have had positive effects elsewhere. Therefore, the evidence suggests that the interventions may be effective, but any large-scale implementation of these approaches needs to be accompanied by further evaluation to identify their impact. Thus, we refer to them as promising approaches.

The policies and programs presented in this section are methods for reducing the risky behavior of those young people who are already engaged in them (type II risk) and providing second chances for those who are suffering the consequences of such behavior (type III risk). The young people most likely to benefit from these approaches, from school dropouts to the incarcerated, are difficult to reach and are often excluded from mainstream interventions. Risky behavior and its negative outcomes can be imposed by others (parents taking a young person out of school and into work, or schools requiring a pregnant girl to drop out) or can be

self-imposed (unprotected sex, joining a gang, or committing a crime). In either case, the majority of young people who are in these categories have a desire to return to their original path, especially when they have begun to suffer the consequences of their behavior.

Classifying these programs as promising rather than core does not suggest that they are of secondary importance, only that the evidence base for them is weaker. Fortunately, the number of evaluations being conducted for these programs is increasing over time, with many of the newest findings coming from the LAC region.

The nine interventions presented in this section are summarized in table 8.2, with the first four being of the highest priority. These nine approaches tend to affect fewer kinds of risky behavior than the core policies and are targeted to narrower groups. Some of the programs can be costly, but the payoff is very high for young people who still have a lifetime of potential productivity ahead of them. Others are not costly when compared with other human capital development programs and, in fact, can have tremendous payoffs for governments over the long term. Each approach is accompanied by a box that describes a sample program.

Promising Approach 1: Education Equivalency Degree Programs for Overage Young People

The purpose of these programs is to give young people a second chance to complete their formal education after they have dropped out of school. Well over 36 percent of young people in LAC never complete secondary education, and 6.5 percent never complete primary schooling (see chapter 5). Therefore, providing flexible and high-quality equivalency programs to enable them to obtain formal primary and secondary degrees is an important part of any portfolio of investments targeting youth at risk. Demand for these programs is high among out-of-school young people who recognize that having a certified degree improves their employment potential, as well as enabling them to enter tertiary education and increasing their future earnings.

While there are few formal evaluations in LAC of such programs, available evidence suggests that the rates of return can be quite high and costs relatively low. In a recent study evaluating cost-benefit ratios of a range of youth investments in developing countries (including LAC), adult basic education and literacy programs and other lifelong learning programs had the highest returns (Knowles and Behrman 2003). Another study estimating the rates of return to lifelong learning programs in Colombia confirmed

Table 8.2. Summary of Promising Approaches for Targeting Youth at Risk

Policies and programs	*Target group (risk type)*	*Risks addressed (secondaryEvidence effects)*[a]	*(examples)*	*Factors for success*
1. Education Equivalency	School dropouts (type III)	1 (2, 3, 4, 5)	Promising (Dominican Republic, Honduras, United States)	Practical curriculum, flexible time schedule, life skills training as a core part of the curriculum, and methods of instruction appropriate for young adults.
2. Youth Job Training that Includes Life Skills and Internships	School dropouts and unemployed youth (types II, III)	2 (3, 4, 5)	Promising (Argentina, Chile, Colombia, Dominican Republic, Peru)	Strong links with employers, a supply of qualified training institutions, and life skills as a core part of the curriculum.
3. Financial Incentives to Avoid Risky Behaviors	Poor youth (type I)	1 (2, 3, 4, 5)	Promising (Colombia, Mexico)	Young people (not parents) receive a cash transfer; additional incentive at secondary completion conditional on specific uses (for example, further education, health care, or starting own business); target observable behaviors.
4. Supervised After-School Programs in Youth-friendly Spaces	School dropouts, underperformers (types II, III)	1, 3, 4, 5	Promising (Brazil, United States)	Use existing public spaces.
5. Formal Youth Service (Public Internship)	Universal or poor youth (types I, II, III)	2, 3, 4, 5	Proven (United States) Promising (Jamaica)	Long term (3–12 months). Incorporate technical and life skills training combined with follow-on internship. Can be alternative to military service, volunteering, or as a prerequisite for receipt of higher education scholarship.

(*continued*)

Table 8.2. Summary of Promising Approaches for Targeting Youth at Risk *(continued)*

Policies and programs	*Target group (risk type)*	*Risks addressed (secondary effects)*[a]	*Evidence (examples)*	*Factors for success*
6. Mentoring	At-risk youth (types II, III)	1, 3, 4, 5 (2)	Proven (United States)	Screen and train mentors; ongoing monitoring of the mentoring relationship.
7. Employment Services for Youth	Poor communities (types I, II, III)	2	Promising (Dominican Republic, Peru)	Extra social and financial support for reaching disadvantaged young people in poor areas.
8. Life Skills Training in All At-Risk Youth Interventions	At-risk youth (types I, II, III)	1, 2, 3, 4, 5	Promising (*Jóvenes* programs in various LAC countries)	Include skills related to self-concept, cognitive and social interaction, and occupational training; teach knowledge of social services.
9. Self-Employment Support	At-risk youth from poor communities (types II, III)	2	Promising (Peru)	Impact evaluation from only one program. Design components of best programs unknown.

Note: a. 1 – School Leaving; 2 – Youth Unemployment; 3 – Risky Sexual Behavior; 4 – Substance Use; 5- Crime and Violence.

the profitability of these investments in adult education, especially among young adults (World Bank 2005h).

Successful approaches tend to share three characteristics. First, the program design must take into account whatever factors are causing early school leaving in the first place. Second, flexible schedules (for example, nighttime and weekend classes), practical curricula (including life skills), and methods of instruction geared to older cohorts are important elements to include when targeting out-of-school young people. Ensuring that equivalency programs have strong links with the formal education system is also important, both to guarantee the formal equivalency of degrees and to reduce costs by using existing public infrastructure (see box 8.2). Finally, it is vital for the success of these programs to build relationships with potential employers to maximize the chances of their students finding jobs after graduation.

Box 8.2

Second-Chance Education in the Dominican Republic

The net enrollment rate at the secondary level in the Dominican Republic is only 35 percent, and the primary completion rate is just over 50 percent. For the large share of Dominican young people and adults who are unable to complete their formal education and are over school age, the Ministry of Education provides flexible options to continue their schooling through a nationwide network of primary schools to provide education equivalency. Costs are roughly $50 per beneficiary per year.

EBA (for 8th grade equivalence) and PREPARA (for secondary education) classes are flexible, accelerated programs offered at nighttime and on weekends. The programs include training in life skills in addition to covering the regular curriculum. For students scoring well on the 8th grade leaving exam, PREPARA offers a fast-track course covering four years of secondary schooling in two years. Beneficiaries receive formal diplomas upon completion, and dropout rates are very low. Young people participating in these programs tend to do as well as those in the formal schooling system on national exams, despite their more difficult situations.

Source: World Bank 2006l.

Promising Approach 2: Job-Training Programs for Youth at Risk That Include a Mix of Job Training, Life-Skills Training, and Internships

A new generation of training programs for at-risk youth has emerged in LAC over the past decade that has provided more employment prospects for the target population than more traditional supply-oriented vocational education approaches (see box 8.3). These programs, known as *Jóvenes*, tend to be decentralized, demand-driven training programs that offer poor young people a comprehensive package of workplace internships preceded by training in both professional and life skills (Diaz and Jaramillo 2006). The specific programs vary, but most of them follow a model first piloted in Chile. Disadvantaged young people are identified using, for example, out-of-work statistics, socioeconomic data, and poverty mapping. Qualified private firms, NGOs, and public and nonformal training institutions provide training on a competitive basis. Providers are required to line up internships and to ascertain what kinds of skills are needed by local employers before

Box 8.3

The Impact of the *Jóvenes* Model

The impact of *Jóvenes* programs has been heterogeneous across the region, but most have had positive effects on employment, the quality of jobs, and wages. This differs significantly from similar programs in OECD countries, which have had a less positive impact.

	Argentina	Chile	Peru
Coverage (people)	116,000	165,000	42,000
Cost per Trainee	$ 2,000	$730–930	$434
Employment effect	+10–30%	+18–22% Larger for younger ages	+13% (20% higher for women than men)
Earnings effect	+10%	+20–25%	+12.5%

Sources: Diaz and Jaramillo 2006; IADB 2006; Ryan 2006.

they can receive any funds for training. In this way, internships provide information on the skills for which there is a demand. Intensive life skills training focuses mainly on problem-solving skills, correct workplace behavior, conflict management, job search techniques, and building self-esteem.

Impact evaluations of *Jóvenes*-type programs in Argentina, Chile, the Dominican Republic, Peru, and Uruguay have produced positive results for program participants in at least two variables of interest: the beneficiaries' chances of job placement, and the quality of their work as measured by salary, benefits, and formal contracts.[5] The evaluations have shown that women and younger beneficiaries have higher rates of return from participating in these programs than men and older cohorts (Diaz and Jaramillo 2006; Jaramillo 2006; IADB 2006). Given their low cost per trainee and their positive impact on employment and earnings, nearly all such programs have a positive benefit-cost ratio, even without considering any positive externalities such as reduced risky behavior.

The success of these programs depends on how they are designed and on the quality of the targeting mechanisms. A strong link with employers is central to ensuring that training remains relevant and that on-the-job experience through internships is an integral part of the training.

Promising Approach 3: Financial Incentives to Youth to Avoid Risky Behaviors

Cash incentives can be an effective means for encouraging people to change their behaviors in a positive manner. For example, conditional cash transfer (CCT) programs have been used across the developing world to encourage poor families to send their children to school and to regularly visit health centers. Although most of the research has confirmed this type of program's effectiveness in affecting behaviors of parents and of young children, evidence suggests that the educational impact may in fact be stronger among older children at the secondary school level (Attanasios, Meghir, and Santiago 2005; Behrman, Parker, and Todd 2005; Behrman, Sengupta, and Todd 2005; Parker 2006). Namely, cash transfers have been successful in decreasing school dropouts among Colombian and Mexican youth. But CCTs are not the only tool for affecting youth education decisions: there are other tools such as individual learning accounts (see box 8.4) and targeted financial assistance for tertiary education (a mixture of loans and grants).

This suggests that cash incentives may be an effective mean for affecting a range of risky youth behaviors. There is emerging evidence that

Box 8.4

Individual Learning Accounts in Colombia and Mexico

Individual Learning Accounts, which are becoming popular in OECD countries, provide strong incentives for poor young people to stay in school until they have completed secondary education while encouraging them to save money for postsecondary options, including tertiary education, health benefits, and setting up businesses. The easy implementation and attractive features of these accounts—induced savings, consumption smoothing, and low public burden—make them a promising option for middle-income countries. The amount that an individual is entitled to depends on the amount saved and the kind of training desired.

The municipality of Bogotá, Colombia, introduced a program that gave special bonuses for finishing secondary school. Mexico introduced the *Jóvenes con Oportunidades* program in 2004 to encourage completion of upper secondary school and provide incentives for postgraduation opportunities. Students accumulate points from the last year of lower secondary until they graduate from upper secondary. Credit points are converted into a savings account and deposited into individual accounts in the National Savings Bank, which beneficiaries can tap for further study or to start a business if they complete upper secondary before turning 22.

Source: World Bank 2006a.

CCTs can reduce risky behavior. For example, an evaluation of Mexico's *Opportunidades* (CCT) program has shown a reduction in smoking and alcohol use among 15- to 21-year-olds of about 15 percent, compared with a control group, after five years of the program's operation (Parker 2006). The program also had a significant impact on reducing the number of sexual partners (from an average of two sexual partners down to only one partner). However, it had no impact on the age of first sexual experience, on the probability of using contraceptives, on the prevalence of STIs, or on pregnancies. The absence of impact may be because the tool was ineffective in influencing these behaviors or a result of the weakness of support services in these areas (Parker 2006). A similar program in Bangladesh increased the age of first marriage and increased school completion rates (World Bank 2006a).

Promising Approach 4: Supervised Youth Development Activities in Youth-Friendly Spaces

Research has shown that the simple construction of community centers or sports fields does not affect youth behavior; however, *supervised* youth activities can have an important positive impact on young people that helps them to perform better in school (or return to school) and in life. Studies in the United States has shown that most risky behavior by young people occurs in the after-school hours (between 3 p.m. and 5 p.m.) and that the provision of fun after-school activities with an academic focus can have an impact on a range of important skills and kinds of behavior. A 30-month impact evaluation of one such program showed that participants increased their overall grade point averages by 11 percent and decreased the number of days that they were absent from school by 66 percent (Schinke, Tepavac, and Cole 2000). Other programs have found that young people attending after-school programs pay closer attention in class and are more connected to their schools than their nonparticipating peers, thereby increasing the overall protective effect of schools. Specifically, participants report that they are less likely to have started drinking alcohol and have better anger management skills than their nonparticipating peers (see box 8.5).

Box 8.5

Brazil's Open Schools

Known as *Abrindo Espaços* in the state of Pernambuco, *Escola da Familia* in the state of São Paulo, and by other names in other states, these open-school programs provide a range of academic, athletic, cultural, and work-related activities for young people after school and on weekends. These programs are cost effective as they maximize existing public spaces and are largely staffed by dedicated volunteers and older young people who, in exchange for their commitment to the program, receive tuition waivers at private universities throughout the state.

According to UNESCO, a central partner in the inception of the programs, schools participating in Pernambuco's *Abrindo Espaços* experienced a 60 percent reduction in violence as well as reduced rates of sexual aggression, suicide, substance abuse, theft, and armed robbery. Participating schools in other states are also showing positive results.

Source: World Bank 2007b.

A review of the Extended Service School program that supported 60 after-school programs in the United States identified good practices and potential pitfalls for policy makers and practitioners. First, target schools that serve low-income families must be aware of the difficulty of attracting older students because they tend to be less interested than younger students in any program that is offered. The activities selected and their characteristics will determine how many students decide to participate. Second, staff must be qualified, creative, and committed. Finally, there is no one kind of program that is optimal; rather, offering a variety of experiences is most likely to attract young people.

There have been few evaluations of programs that provide youth-friendly spaces and target out-of-school young people, but those that have had positive results have focused primarily on providing activities under caring adult supervision rather than using scarce resources to build new infrastructure. A key challenge for many such programs is the difficulty in attracting and retaining dynamic high-quality staff because of tight budgets and limited funding as well as a shortage of qualified youth workers. However, using existing infrastructure and choosing activities that are not overly resource intensive can keep costs manageable.

Promising Approach 5: Youth Service Programs or Public Sector Internships

Actively engaging at-risk youth in delivering public services is an effective way to help them to gain experience, knowledge and values to make the transition into a life of productive employment and active citizenship (Moore, Benitez, and Sherraden 2002; World Bank 2005d). *Youth service* is an organized period (generally 3–12 months or more) of engagement in the community or in public service in exchange for a minimal stipend, usually to cover transport and food costs. In return, these young people gain valuable work and life skills on the job under the supervision of trained service providers, while contributing to community development by reinforcing many services that are usually understaffed or unavailable. A young person serving as an assistant in an understaffed community childcare center, for example, benefits from both on-the-job training in childcare skills from qualified providers and learning workplace expectations such as appropriate behavior, dress, and punctuality. Other examples of youth service activities around the world include providing basic health services in public health clinics, building sustainable housing, improving literacy rates, protecting the environment, and building small-scale infrastructure (Moore, Benitez, and Sherraden 2002; World Bank 2005d, 2006c). International assessments of more than 200 civil service programs have shown

that they have provided young participants with many benefits, including increased work skills, more career options, advanced educational achievement, increased self-esteem, decreased isolation, and a greater sense of civic responsibility (Moore, Benitez, and Sherraden 2002).

There are many different models for implementing youth service programs (Moore, Benitez, and Sherraden 2002; World Bank 2005d). Mandatory national programs in Brazil, France, Germany, and Israel bring young people together from across ethnic groups and social classes for the common cause of serving their country as an alternative to military service. However, such large programs can be costly, difficult to manage, and vulnerable to political manipulations. By contrast, voluntary programs targeted to those in need of a first work experience, such as the Americorps program in the United States (Jastrzab et al. 1996, 2004), can provide greater returns than mandatory programs (see box 8.6).

Box 8.6

Youth Service in the United States and Jamaica

A longitudinal study of the program Americorps showed its impact 15 years after beneficiaries left the program. At-risk program participants, relative to peers in a control group,

- Were much more likely to have worked for pay
- Had worked more hours
- Were less likely to have been arrested
- Had increased their civic engagement
- Were more connected to their communities
- Were more likely to choose a career in public service

Jamaica's National Youth Service Program begins with one month of residence-based training in job and life skills for unemployed secondary school graduates. This is followed by a six-month internship in the areas of early childhood education, administration, customer service, or micro entrepreneurship. Participants receive a stipend to cover their transportation costs and food. More than 1,400 young people participate each year, with 60 percent transitioning to either permanent employment or continuing their studies, compared with 34 percent of similar young people in a control group.

Source: Jastrzab et al. 2004; www.nysjamaica.org.

Promising Approach 6: Mentoring Programs to Pair Youth at Risk with a Caring Adult

Mentoring programs have been proven to be a cost-effective means for affecting a range of risky behaviors such as crime and violence, substance abuse, and reducing school dropouts. When compared with other successful risk prevention programs, mentoring programs consistently show high rates of return (see appendix E). These programs typically involve matching a caring adult with a young person with the aim of providing teaching, coaching, and role modeling—or even just a friend to listen. This one-on-one mentoring relationship ideally provides the young person with sustained contact with an adult who is neither a teacher nor a preacher (see box 8.7).

Box 8.7

Evaluating the Impact of Mentoring Programs in the United States

A meta-review of 55 evaluations of mentoring programs in the United States showed that programs have a significant and measurable impact, although not a large one. Specifically, the review showed that mentoring programs

- Reduce problem or high-risk behavior
- Improve academic and educational outcomes
- Enhance career and employment outcomes
- Have similar effects across different ages, genders, and ethnicities

The results of an impact evaluation conducted of the Big Brothers–Big Sisters of America program showed that

- Program participants are half as likely as nonparticipants to use drugs. The results are even starker for minorities with a Big Brother or Big Sister. They are one-third as likely to use drugs as minority youth without a mentor.
- Little Brothers and Sisters skipped half as many days of school as the control group.
- The quality of their relationships with their parents was better.
- The program had no impact on the children's feelings of self-worth, self-confidence, or social inclusion.

Sources: DuBois et al. 2002 ; Tierney, Grossman, and Resch 2000.

The quintessential U.S. mentoring program is the Big Brothers–Big Sisters of America (BBSA) program, which has been subject to randomized evaluations. The results have led to BBSA being identified as a flagship youth intervention model. The program has precisely the developmental rather than problem-based focus that seems to be preferred by practitioners. Each young person is assigned a case worker who is tasked with identifying potential mentors. Mentors are carefully screened prior to being selected, and the matching process involves an interview of the proposed mentor by the young person and a separate interview conducted by the parent(s) of the young person, thereby involving families in the process from the beginning. The BBSA then offers voluntary structured activities for the matched pair to participate in, which are generally of a low-cost nature.

The most exhaustive study to date on the impact of mentoring is a meta-analysis that supports the general consensus that youth mentoring programs are most effective when targeted to the most disadvantaged young people, defined as those who are "experiencing conditions of environmental risk or disadvantage" (DuBois et al. 2002). According to the study, the most successful programs are those that offer ongoing training for mentors, structured activities, expectations of frequent contact, and close monitoring of overall implementation.

Promising Approach 7: Employment Services Targeted to Youth

One area in which there has been much innovation in the last few years is the provision of employment services to young people, which is a promising approach to addressing the constraints of imperfect information in the labor market (see box 8.8). Some ways in which these employment services have improved the job-search situation for young people include greater use of the Internet, institutional networking to enhance labor market information systems, and more interaction with employers, resulting in higher demand for these services (Jaramillo 2006). Increasing the information available to at-risk youth is particularly important because informal networks play a significant role in transmitting information about job opportunities in LAC, and disadvantaged youth have fewer of these networks than those who are better off. Consequently, the demand for employment services may be higher among disadvantaged young people than among their more privileged peers.

Despite the promising nature of employment services, one limitation is the difficulties in reaching young people who are truly disadvantaged. Employment services are often offered through government offices, which are rarely located in marginalized urban areas where at-risk youth

Box 8.8

Employment Services in Argentina and Venezuela

Two examples of employment services are in Venezuela and Argentina. In Venezuela, the state provides young people with mostly free assistance with their job search, in addition to regulating private providers of employment services.

According to an evaluation conducted in 2001, Argentina's Support for the Job Search program produces participants who perform more intensive and varied job searches than their peers. However, the study did not show that the program had any impact on the probability of the young people getting a job. This may have been because the size of the sample for the evaluation was small and the study was conducted during the recession.

Source: Jaramillo 2006.

tend to live. Nor is the Internet a realistic way to deliver employment services to these young people given their lack of access to computers or knowledge about how to surf the Internet. To respond to this challenge, various nonstate actors, such as the Red CIL-ProEmpleo network in Peru, have filled the void by trying to provide a more effective link between the training institutions, vocational schools, and secondary schools that serve underprivileged populations.

Evidence from the United States also suggests that these programs work best when they involve social workers who can assist clients with other factors that affect their ability to work but are not included in standard employment services, such as transportation to the workplace or options for childcare.

To date, the impact of labor intermediation programs for young people has not been comprehensively evaluated, but their initial results are promising.

Promising Approach 8: Incorporate Life Skills Training in All At-Risk Youth Interventions

Providing training in life skills is an important component to include in interventions that target at-risk youth, because they will need these life skills to take full advantage of education and employment opportunities, as well as to be full participants in their communities (Guerra 2006; Hahn, Leavitt, and Lanspery 2006). Research shows that many at-risk youth, especially

those who have dropped out of school, need to overcome deficiencies in key social skills from their childhood (National Research Council and Institute of Medicine 2005; U.S. Surgeon General 2001). These deficiencies can have a negative impact on their self-concept as well as on their attitudes and general knowledge about how to function effectively in a variety of adult environments, particularly in the workplace. A lack of basic life skills can cause young people to become socially excluded and unemployable.[6]

Three key categories of life skills can be derived from training programs across the LAC region and the United States: (i) *self-concept skills*, including self-control, self-esteem, and coping strategies; (ii) *cognitive skills*, including decision making, problem solving, and critical thinking; and (iii) *social context skills*, including skills related to communication, health and self-care, social interaction (such as cooperation, teamwork, and leadership), occupational skills (such as punctuality, appropriate dress, and appropriate conduct at job interviews), and civic skills (such as the use of environmental resources, citizenship rights, and the use of community social services) (Casey Family Programs, http://www.caseylifeskills.org/pages/assess/asses_index.htm; Grau Batlle 2006; Hahn, Leavitt, and Lanspery 2006; PAHO, http://www.paho.org/English/HPP/HPF/_ADOL/Lifeskills.pdf;UNICEF,http://www.unicef.org/lifeskills/index_whichskills.html; Washington State University, http://ext.wsu.edu/lifeskills).

As discussed in chapter 6, the formation of these skills is influenced by three important factors: family, school, and peer group interactions. New evidence is beginning to show that such skills can also be acquired by vulnerable young people either in school or in out-of-school environments such as equivalency programs, after-school programs, public health centers, and job training programs. Results of program evaluations in LAC have found that teaching a young person some life skills can delay the onset of drug use, prevent risky sexual behavior, teach anger management, improve academic performance, and promote positive social adjustment. Research on interventions that address specific skill areas has shown them to have been effective in promoting desirable behavior such as sociability, good communication, effective decision making, and conflict resolution, as well as preventing risky kinds of behavior (Casey Family Programs, http://www.caseylifeskills.org/ pages/assess/asses_index.htm;Grau Batlle 2006; Hahn, Leavitt, and Lanspery 2006; PAHO, http://www. paho.org/English/HPP/HPF/ADOL/Lifeskills.pdf;UNICEF, http://www.unicef.org/lifeskills/index_whichskills.html; Washington State University, http://ext.wsu.edu/lifeskills).

Promising Approach 9: Youth Entrepreneurship Programs on a Pilot Basis

Although not many young people choose to go into self-employment (see chapter 5), it may be the only option for those who live in areas with low labor demand. Young entrepreneurs have identified several constraints that they face in trying to create and build a business, which, they feel, are not faced to the same degree by adult entrepreneurs. These can be summed up as a lack of access to financing, to formal networks, and to clients, suppliers, and skilled workers (Jaramillo 2006; World Bank 2006a).

Thus, programs designed to promote gainful self-employment represent a promising opportunity for youth at risk that may in some cases even generate new jobs. Although many of these types of programs are aimed at young entrepreneurs from middle- or upper-middle-class backgrounds with a college education (Jaramillo 2006),[7] other programs focus on young people from poor households.[8]

Youth entrepreneurship programs cover a range of services, including information and training in how to set up a business, life-skills training and basic-education remediation, personalized technical assistance, support in accessing microcredit, mentoring, and internships.

Evidence on the impact of such programs is scarce. There is only one LAC example to draw from—the Youth Microentrepreneurs' Qualification Program in Peru. This program has been evaluated twice with a quasi-experimental design, and the results are encouraging. The evaluations found that four months after completing the program, beneficiaries were 8 percent more likely than those in the control group to be operating a business, and their earnings had also increased by 8 percent. After one year, the program participants' businesses were 40 percent more likely than those in the control group to still be operating (Jaramillo 2006).

General Policies with a Surprisingly Strong Effect on Youth at Risk

Both the core policies and the promising approaches are direct interventions to benefit at-risk youth, but there are also more universal policies that may benefit everyone while having a particularly significant effect on at-risk youth. These include effective policies that aim to counter critical risk factors at the community and macro levels.

The seven general policies discussed in this section and summarized in table 8.3 cut across all five kinds of risky behavior. Some are inexpensive

to put into practice but may face opposition from powerful groups with entrenched interests (for example, increasing the prices of tobacco or alcohol). Others may be more expensive and require collaboration between agencies that typically do not interact with each other (such as the police and education and health officials). All require a political commitment to reducing the social environmental risks faced by young people.

General Policy 1: Safe-Neighborhood Programs, Emphasizing Increased Police Presence and Accountability and Better Police-Community Relations

Safe-neighborhood programs aim to reduce violence in volatile communities through an integrated, multisectoral approach. These programs generally emphasize a combination of "problem-solving policing"—data and analysis to identify problems, engage in preventive rather than reactive policing, and improve police-community relations—and better public services (see box 8.9).

This holistic approach, if appropriately implemented, tends to address multiple risk factors and requires collaboration among sector ministries at the local level. It targets young people and their families with small-scale improvements in much-needed basic services (education, health, water, and security). It also seeks to increase the capacity of local law enforcement and the associated government ministry to enhance both the presence and the reputation of police at the community level. Safe-neighborhood programs require a proactive partnership between local citizens and the police, in which citizens are involved in identifying the problems of crime. Many such programs also include activities for young people (second-chance education, after-school programs, job-skills and life-skills programs, and so forth), that offer an alternative to engaging in crime and violence, and increased investments in early childhood development programs (IADB 2001c; WHO 2002; World Bank and UNODC 2006).

Although international evidence on whether and how community policing affects crime reduction is mixed, some studies have shown that it increases the public's perception of safety as well as the image of the police, which are both essential elements in addressing the underlying causes of youth violence.[9] In addition, the concept of "fixing broken windows" has received much attention in relation to crime prevention by emphasizing the importance and maintenance of common and public spaces, including safe routes to school (Guerra 2006). To complement

Table 8.3. Summary of General Policies Affecting Youth at Risk

Policies and programs	*Target group*	*Risks addressed (secondary risks)*[a]	*Evidence (examples)*	*Factors for success*
1. Target high-violence neighborhoods with integrated investments • Safe neighborhoods	Very violent communities	1, 2, 3, 4, 5	Promising (Brazil, Colombia, Dominican Republic, United States)	Include improved services (especially education, health, and water), neigh-
2. Reduce the availability of firearms • Enforced registration • Bans on specific days	Universal (emphasis on very violent communities)	5	Promising (Colombia, United States)	
3. Reduce the availability of alcohol and tobacco • Pricing and taxes • Licensing • Limited hours and places of sale	Universal (emphasis on very violent communities)	4, 5 (1, 2, 3)	Proven: Price Increase (United States) Promising: Other (Colombia, Puerto Rico, United States)	
4. Increase access to contraception • Social marketing of condoms • Oral and emergency contraception over the counter	Universal	1, 3	Promising (Chile, Mexico)	Strong political support; cost subsidization for poorer consumers.

5. Strengthen the juvenile justice system • Youth courts • Graduated sanctions • Rehabilitation	Universal (emphasis on very violent communities)	4, 5	Promising (United States)	Efficiency, fairness, reliability, graduated sanctions, residential and nonresidential treatment programs, mentoring, and family interventions.
6. Increase antiviolence messages (through media, schools, and communities)	Universal (content targeted to young people)	1, 2, 3, 4, 5,	Promising (United States)	Communitywide campaigns to change norms (for example, corporal punishment in schools and homes, guns as sign of masculinity, acceptance of interpersonal violence) combined with direct services (parenting training, home visitation).
7. Provide birth registration to the undocumented	The undocumented	1, 2, 3, 4, 5	Promising (Colombia, Dominican Republic, El Salvador)	Modernization of civil registry systems; link birth registration with social services, especially health care, hospitals, and schools.

Note: a. 1 – School Leaving; 2 – Youth Unemployment; 3 – Risky Sexual Behavior; 4 – Substance Use; 5 – Crime and Violence.

Box 8.9

The Dominican Republic's *Mi Barrio Seguro* Program

The *Mi Barrio Seguro* (My Safe Neighborhood) program is targeted to the city's highest crime and drug trafficking areas. Following a comprehensive approach to community upgrading, it requires intensive cross-sectoral coordination led by the Ministry of the Interior in collaboration with the Ministries of Education, Health, Youth, and Social Protection; the police; and, most important, community leaders. The program aims to increase police presence and infrastructure in high-crime neighborhoods, introduce community policing, improve neighborhood security (for example, streetlights), create new schools and literacy programs, and hold workshops with young people and neighborhood organizations.

The initial results of an evaluation of *Mi Barrio Seguro* demonstrated a 68 percent reduction in homicides in the pilot neighborhoods in the first six months of implementation. As a result of the program, local opinion of the police force in the 12 high-violence neighborhoods in Santo Domingo in which the program operates was much more favorable. This prompted the government to expand the program to other neighborhoods and cities.

Source: World Bank and UNODC 2006.

this approach, many cities in LAC have begun to emphasize the development of social capital—the networks, connections, and trust—that facilitate community life in addition to basic services and public facilities. Recent studies in the United States have found that social cohesion leads to reduced violence, even after controlling for poverty (Guerra 2006; Kennedy et al. 1998; Sampson, Raudenbush, and Earls 1997).

General Policy 2: Reduce the Availability and Use of Firearms

Policies and programs that reduce the availability and use of guns have been proven to reduce homicide rates as well as to improve the quality of life in the affected neighborhoods. In Colombia, policy makers in Cali and Bogotá banned the carrying of guns on election days, weekends after paydays, and holidays—dates traditionally associated with high homicide rates, especially among men ages 15 to 34. Police enforced the ban through randomly established checkpoints in high-risk areas and through discretionary searches of individuals. Violators with legal weapons were fined and had their firearms temporarily confiscated, while those with

illegal guns were arrested and their guns permanently confiscated (Villaveces et al. 2000). This intervention has proven to be effective in the context of high levels of homicide perpetrated by and against young people (see box 8.10). However, it is possible that such a program is effective only under very violent conditions; therefore, it is unclear whether this approach would be equally successful in less violent cities. And it is not clear what aspect of the program is responsible for the results, whether it was the incarceration of those possessing illegal firearms or the deterrence effect of the ban.

It may be possible to implement discretionary police searches of individuals only in situations where the police command a certain amount of respect, or where the constitutional rights of citizens are nonexistent or unenforced. Given the importance of fostering a relationship of codependence and trust between communities and local authorities (see General Policy 1), programs giving the police the right to use discretionary power may increase local antagonism toward them if these powers are abused. Therefore, public trust in the police is a necessary precondition for this approach to succeed.

The banning of firearms involves both legislation and enforcement. In Cali, the municipality was responsible for passing the necessary by-laws that criminalized the carrying of weapons on certain days. Perhaps more important, the municipalities launched an awareness campaign to promote the new measure and garner public support. On the ground, the police needed to receive some training in the new procedures. At the

Box 8.10

Banning Firearms in Colombia

A study published by the American Medical Association evaluated the effects of programs that ban firearms in Colombia by comparing homicide rates on one weekend when the ban was in force and another when it was not. The results showed decreases of 14 percent and 13 percent in Cali and Bogotá, respectively, on the weekend when the ban was enforced. There were reductions in homicides by all weapons, not just firearms. A similar intervention in the United States confiscating illegal firearms in Kansas City yielded a 49 percent decrease in firearm-related crime.

Source: Villaveces et al. 2000.

state and regional levels, the attorney general and the Ministry of National Security are important stakeholders.

General Policy 3: Increase Prices and Reduce Availability of Alcohol and Tobacco

Policies that reduce young people's access to alcohol and tobacco can have an important impact on a range of negative outcomes. As discussed throughout this report, alcohol has consistently been identified as a contributing factor to a host of serious outcomes, including the three leading causes of death for young people in the region: homicide, suicide, and motor vehicle crashes (PAHO 2007).

One of the most important policy determinants of youth smoking and alcohol consumption, particularly among older teens, is price. Young people, and particularly poor young people, typically have very little money to spend. Consequently, prices can have a disproportionately strong impact on their substance consumption decisions compared with adults. In a landmark U.S. study, it was demonstrated that the drop in cigarette prices in the early 1990s could explain 26 percent of the subsequent increase in consumption (Gruber and Zinman 2001). More important, this price sensitivity has been shown to rise for more socioeconomically disadvantaged groups, such as those with less-educated parents. By contrast, increasing the price of alcohol and tobacco, especially through tax increases, has been shown to reduce overall consumption, with a particularly significant effect on young people (Karle et al. 1994; PAHO 2007). The increased revenues from such taxes can also be used to support other substance use prevention programs. A series of studies across the United States found that price increases on alcohol had a more pronounced impact on heavy drinkers ages 16 to 21 than on occasional drinkers (Chaloupka, Grossman, and Saffer 2002). This is significant because heavy drinking is more closely linked with violent behavior than occasional drinking. Another U.S. study found that a 10 percent increase in the price of alcohol contributed to a 4 percent reduction in homicides and other violent crimes among college students. This reduction was consistent across all crimes, including rape, robbery, assaults, domestic violence, and child abuse (Grossman and Markowitz 2001). A potential downside is the substitution effect toward other substances or the production of home-brewed alcohol.

Some of the most effective ways to restrict sales of alcoholic beverages include controlling the hours of operation and the density and location of outlets and enforcing minimum-age purchasing laws (see box 8.11).

Box 8.11

Alcohol Restrictions and Reduced Violence in São Paulo, Brazil

In 1999, the Secretary for Social Defense in Diadema, a suburb of São Paulo, developed a map of criminality for the area. It showed that Diadema had approximately 4,800 bars, more than 1 bar for every 800 inhabitants. In 1999, there were 374 homicides in the district, with nearly half of the homicides occurring between 11 p.m. and 6 a.m. In 2003, authorities restricted the hours of bar operation to 6 a.m. to 11 p.m.

An evaluation two years after the law's implementation showed that there had been a 45 percent reduction in homicides and approximately a 26 percent reduction in violence against women. Two features of the municipal law on alcohol sales make this strategy particularly effective: (i) penalties for violating the law are adjudicated administratively, not criminally; and (ii) penalties are progressive in nature and clearly established in the law. The first violation results in a warning, the second in a fine, the third is a fine and temporary license suspension, and the fourth is license revocation.

Source: PAHO 2007; PIRE 2004.

Several studies have demonstrated the relationship between these policies and reduced consumption, violence, and other related problems (Babor et al. 2003; Chikritz and Stockwell 2002; Concha-Eastman et al. 2002; PAHO 2007). For example, in the mid-1990s, the mayor of Cali, Colombia, commissioned surveys that found that 40 percent of victims of violence and 26 percent of victims of violent death in the city were intoxicated. In response, the mayor promoted and implemented a semidry law that closed bars and clubs at 1 a.m. on weekdays and at 2 a.m. on Fridays and Saturdays. Over a six-year period, homicide rates were reduced from 124 per 100,000 inhabitants in 1994 to 88 per 100,000 in 1998 (Concha-Eastman et al. 2002). Examples of other restrictions include prohibitions or controls on alcohol use at community events and sports events or in public areas such as parks and streets.

A key factor in most of these policies is the credible threat of sanction. Having in place appropriately severe sanctions for merchants who violate the laws governing alcohol sales can reduce or deter future violations, especially if they include both administrative and criminal penalties (for

the individual salesperson *and* the retail establishment). The more effective sanctions are progressive penalties that can include warnings, fines, firing of individuals, closing establishments, and imprisonment (Babor et al. 2003; PAHO 2007).

General Policy 4: Increase Access to Contraception by Introducing Condom Social Marketing Programs and Policies to Make Emergency Contraception Available

Providing young people with the necessary knowledge and means to protect themselves is a key component of investing in their well-being. For more than three decades, condom social marketing (CSM) programs have been successful in increasing both condom use and knowledge of safe sex. The intervention consists primarily of distributing condoms through commercial channels, government services (such as health clinics and schools), and community-based organizations at subsidized prices (or, in some cases, free of charge). Many CSM programs also include information campaigns, use attractive packaging, and employ other methods of strategic targeting to reach particularly vulnerable populations.

There are several examples of cases where lowering the price of condoms has dramatically increased their use in the developing world. The world's largest subsidized condom program is in India, where the government purchases condoms in bulk from local manufacturers and then sells them to NGOs and private companies for roughly one-third of the price (Johns Hopkins School of Public Health 1999). Perhaps the best example is that of Brazil in the mid-1990s, where condom sales by *DKT do Brasil* increased from just over 400,000 in 1991 to more than 33 million in 1997 (see box 8.12).

CSM is a way for policy makers to design a pro-youth intervention that takes into account young people's preferences and budget constraints. Although a study on the effect of price on contraceptive use in Bangladesh showed that CSM had had little impact (Levin, Caldwell, and Khuda 1999), other research indicates that, given that adolescents are typically very price sensitive, making subsidized condoms available is likely have a larger impact on their consumption than on that of adults (Price 2001). A recent review of CSM programs supports the idea that they can be pro-poor, given the price sensitivity of low-income groups, but that this is unlikely in their early stages. As these programs mature, however, the inequities in access and condom use diminish. More important, the review finds that social marketing programs appear to be addressing social constraints to access.

Box 8.12

Social Marketing of Condoms: The Experience of *DKT do Brasil*

DKT International, working through its local subsidiary, *DKT do Brasil*, has been helping to make condoms available to low-income Brazilians for more than 15 years. The main strategy of the program is to sell condoms to wholesalers and retailers for a small fee, resulting in a final price to the consumer of between $0.20 and $0.35, a fraction of the price of commercial brands sold in upscale markets in São Paulo and Rio de Janeiro. Revenues collected by DKT are then used to finance social marketing campaign to raise awareness about HIV/AIDS as well as to increase demand for their product.

Perhaps more important, DKT has also concentrated its efforts on increasing access to and availability of condoms at the macro level. First, the organization has lowered barriers to the condom market by reducing import duties from 60 percent to 10 percent and has lobbied to have local manufacturing of international brands. These efforts by DKT have reduced costs for the industry as a whole, allowing condoms to reach the market at lower prices. In addition to this "halo effect" for the commercial condom brands, DKT's 13 percent market share has not been detrimental to their market position, as it consists nearly entirely of lower-income segments of the population that previously did not purchase condoms. The result has contributed to a dramatic overall growth in the Brazilian condom market, from fewer than 50 million in 1991 to more than 300 million by 2002.

Source: Johns Hopkins School of Public Health 1999.

Another important measure also requiring changes in the regulatory and social sphere is the availability of emergency contraception. Making access to emergency contraception more widespread, for example, by allowing individuals to buy supplies before they need them, ensures that they can be used more quickly when needed (thus resulting in greater efficacy), allows for sharing among friends, and minimizes the embarrassment or stigma of obtaining supplies from family doctors or clinics. Controlled trials in India comparing women who were given advance supplies of emergency contraception and women given only information about where to find supplies showed that unprotected intercourse rates were identical between the two groups. However, those who had

received the advance supplies were nearly twice as likely to have taken emergency contraception in the case of unprotected intercourse, and no woman used emergency contraception more than once during the year of the study (despite recipients having been given extra doses) (WHO 2006a).

General Policy 5: Strengthen the Juvenile Justice System to Protect the Rights of Poor Communities and Focus Resources on Youth Courts, Graduated Sanctions, and Rehabilitation Rather Than on Increased Incarceration

Preventing youth crime and violence in LAC requires reforming the criminal and juvenile justice systems to increase their accountability and to protect the rights of the population. In some countries in LAC, political turmoil has disrupted the institutions of justice, which in consequence have been subject to the arbitrary seizure of power by groups or individuals. In some of the most marginalized communities, groups such as insurgents and drug mafias have become an informal governing authority substituting for the rule of law. In addition to system-level reforms, the capacity of communities to provide viable solutions to conflicts and interpersonal problems for young people and others needs to be built up. For example, in 1994, the Ministry of Justice in Colombia began a program of *Casas de Justicia* to increase access to justice services in communities with high levels of conflict. This program not only established formal legal and justice assistance to some of the poorest communities in Colombia for the first time, but also provided such communities with a viable alternative to gang and mafia-based justice (Guerrero 2000).

Rehabilitation programs for juveniles that provide graduated sanctions for successive acts of delinquency have been effective in the United States but have been infrequently applied in LAC. The concept of graduated sanctions is based on combining accountability and sanctions with increasingly intensive punishments, beginning as early as possible in a juvenile's criminal career. The graduated sanctions must be designed to fit a wide variety of offenses and, therefore, should encompass a range of nonresidential and residential (that is, institutional) alternatives (Guerra 2006). Furthermore, these treatment alternatives should be evidence-based, with particular emphasis on cognitive-behavioral and social development programs, mentoring, and family interventions, as mentioned in the previous section. They should not include ineffective programs such as boot camps, shock programs, and hearings in adult court (WHO 2004b).

General Policy 6: Anti-Violence Messages in Local and National Campaigns in All Media, Aimed Particularly at Males and Young People

Communitywide campaigns to change norms appear to have some degree of success in changing public perceptions. For instance, an extensive media campaign was conducted in Cali, Colombia, called "Let's Talk, Cali," in which residents of high-violence neighborhoods were exposed to stories about how people reject violence and learn skills for resolving conflicts. It also included stories about parenting skills that reject punitive child discipline practices (McAlister 2000).

Studies of media violence have shown repeatedly that children imitate violence seen on television. In Jamaica, a study examining factors related to aggression in a sample of aggressive boys and another sample of pro-social boys showed that exposure to television violence was strongly associated with aggressive behavior (31 percent of aggressive boys reported high exposure compared with 13 percent of the pro-social boys). Boys exposed to a lot of television violence were three times more likely to be aggressive than boys who were not exposed. These effects persisted after controlling for exposure to violence in the community and home, parents' marital status, and the degree of parental supervision (Campbell 2006).

General Policy 7: Birth Certificates to the Undocumented

Providing birth certificates to undocumented populations can help to prevent social exclusion and a series of related negative outcomes among youth. Effective strategies to strengthen civil registry institutions and processes include (i) raising awareness of birth registration as a child's right and gaining commitment of all stakeholders through citizen participation; (ii) ensuring coordination between relevant government ministries and institutions at all levels; (iii) creating the necessary infrastructure to reach the entire population; (iv) integrating birth registration with public services, especially health care, education, and antipoverty programs; and (v) providing capacity building to relevant government officials (IADB 2006a, 2006b). Such efforts must start at the policy level by garnering political will and matching legislation on birth registration with local realities, in addition to offering birth registration and certificates free of charge. Successful initiatives are driven by innovative, flexible approaches that involve all levels of society and combine different interventions. Special efforts must also be made to reach the most vulnerable children if universal registration is to be achieved.

There is a wide range of international as well as LAC experience in strengthening civil registry systems. In Argentina, an Inter-Institutional Committee was established to coordinate the work of the national and provincial bodies concerned with birth registration, which included the Ministry of Health and the National Institute of Statistics and Census. The Brazilian government sends boats into the maze of Amazon waterways to offer one-stop shopping for services, including birth registration, which would otherwise be beyond the reach of some 1.5 million persons. Chile dispatches three state-of-the-art vans with computers and satellite connections to the central registry, as well as a marine unit, to reach remote areas and islands to document children. Although most countries have less sophisticated equipment, more than 30 countries, including Colombia and Ecuador, use traveling registrars to search for unregistered children and issue birth certificates. Peru employs indigenous registrars in the Amazon region to establish communication and gain the trust of undocumented minority groups. Panama allows self-governing indigenous groups to conduct their own registration (IADB 2006b).

Notes

1. It is important to note that youth at risk is a new field of study, and only limited evaluation data are available for many strategies and programs in the region. Therefore, the absence of a particular strategy or program from this section does not imply that it is ineffective, but rather that the information available is not sufficient to justify conclusions about its effectiveness.
2. The report focuses on those recommendations over which most policy makers or practitioners have direct control and for which there is sufficient evidence to include the intervention in a basic portfolio of investments, prioritizing those that affect multiple kinds of risky behavior. Thus, macroeconomic policy, such as economic growth and poverty reduction, will not be addressed.
3. More information on the core policies can be found in the sources provided in Appendix 5.
4. Long-term effects include lower risk of polydrug use; smoking at least a pack of cigarettes a day; and use of inhalants, narcotics, and hallucinogens (U.S. Surgeon General 2001).
5. It will be important to begin measuring the impact that *Jóvenes* programs have had on other kinds of risky behavior as this may add to their already positive returns.
6. The International Labour Organization's Latin America Center (CINTERFOR) includes a series of life skills in its definition of employability. It

identifies competencies in the areas of logical thinking, knowing how to learn, the ability to communicate effectively, and having self-esteem as critical to one's ability to *become* employed and *stay* employed.

7. See, for example, the Endeavor Program in Argentina, Brazil, Chile, Mexico, and Uruguay; CORFO in Chile; and Emprende in Buenos Aires.
8. See, for example, the Young Microentrepreneurs' Qualification Program in Peru; Capacitar in Argentina; Promociûn de Microempresarios Juveniles in Argentina; Joven Emprendedor in Brazil; ACUTAR Famieempresas in Colombia; Fundaciûn Esquel in Ecuador; and Capacitaciûn para el Trabajo Independiente in Chile.
9. See, for example, Buvinic, Morrison and Orlando (2003). See also the DESEPAZ Program in Colombia (WHO 2003b).

CHAPTER 9

Moving From a Wish List to Action

The portfolio of recommendations presented in the previous chapter identified the main approaches on which policy makers should focus. But how can these suggestions be used by policy makers to design an effective portfolio of investments for youth at risk? This chapter recommends using three tools to reform a country's youth portfolio: reallocate existing resources, collect better data and carry out appropriate data analysis as a foundation for decision making, and take into account the comparative advantages of all actors when designing and implementing the portfolio.

Improving the Portfolio for At-Risk Youth in a Budget-Constrained Environment: Reallocate Resources Away from Ineffective Programs toward Recommended Programs

All LAC countries spend substantial resources on youth development. Although this report argues that this amount should be increased, it also argues for a better use of existing resources. One strategy to achieve this is to reallocate resources away from less-effective programs and toward those that will have greater impacts.

Equally important to designing an effective portfolio of investments in youth at risk is understanding the policies and programs that have repeatedly been shown to be ineffective or even harmful to young people. This is particularly important when resources are scarce (as in LAC), because the savings generated by eliminating ineffective programs could be used to invest in successful ones.

There are several programs that policy makers should consider eliminating from the at-risk youth portfolio. Many of these programs are aimed at young people who have already engaged in risky behavior (type II) and those who are suffering from the negative outcomes (type III). These programs exist in many countries in the region, and many have popular support, especially because they appear to show that the government is cracking down on behaviors that affect society at-large, such as crime and violence. However, recent research in many countries has demonstrated that these programs are either ineffective or actually provoke risky behavior by young people. Table 9.1 identifies the programs that have consistently failed to reduce risky youth behavior, and each is described below. The first policy in table 9.1 is the worst offender—the popular get-tough programs.

Ineffective Policy 1: Get-Tough Strategies, Including Increased Youth Incarceration, Trying Juveniles in Adult Courts, and Placing Them in Adult Criminal Institutions Can Have Particularly Harmful Effects

The immediate goal of get-tough programs (known as *mano dura* programs, in Spanish) is often to get criminals off the streets. However, evaluations suggest that they actually increase criminal behavior over time rather than deter it. Not only do adult prisons expose young people to harm, but results from a series of studies in the United States indicate that young people placed in adult correctional institutions are eight times more likely to commit suicide, five times more likely to be sexually assaulted, twice as likely to be beaten by staff, and 50 percent more likely to be attacked with a weapon than if they were in a prison designed for young people (Bishop 2000; Bishop and Frazier 2000; U.S. Surgeon General 2001; WHO 2002). All of these factors contribute to higher rates of recidivism.

Moreover, even if young people are in secure juvenile correctional facilities, research shows that incarceration has a higher correlation with future criminal behavior than other important factors such as gang affiliation, weapons possession, or family dysfunction (Benda and Tollet 1999;

Table 9.1. Summary of Ineffective Policies and Programs

Policies	*Target*	*Risks addressed*[a]	*Evidence*	*Factors for ineffectiveness*
1. Get-Tough Strategies • Youth incarceration • Youth in adult courts and prisons	High violence communities; delinquent youth (types II, III)	5	Proven ineffective (United States)	Evaluations suggest that these strategies increase criminal behavior rather than deter it. Adult prisons expose young people to harm, young people are more likely to commit suicide or be assaulted, and they have higher rates of recidivism than adults.
2. Gun buy-backs • Firearms training • Mandatory gun ownership	Universal with emphasis on violent communities (types I, II, III)	5	Proven ineffective (United States)	Evidence from meta-evaluation in the United States indicates that this is a particularly expensive strategy and consistently shows no effect on gun violence, including firearm-related homicides and injuries. Firearms training and mandatory gun ownership have also demonstrated no significant effects.
3. Shock Programs for Violence and Drug Prevention	Young people exhibiting risky behavior (types II, III)	4, 5 (1, 2)	Proven ineffective (United States)	Evaluations have demonstrated either neutral or negative effects on young people.
4. Military-Style Boot Camps	Delinquent youth (type III)	4, 5	Proven ineffective (United States)	Evaluations suggest no significant reductions in recidivism and in some cases increased recidivism. Young people are exposed to other delinquent youths, who act as models and positively reinforce delinquent behavior.
5. Nonpromotion to Higher Grades	Underperforming youth (type II)	none	Proven ineffective	Evaluations demonstrate negative effects on student achievement, attendance, behavior, and attitudes toward school. Nonpromotion can increase risky behavior and outcomes. However, promoting underachieving students without providing the necessary support can also have negative effects.

(continued)

Table 9.1. Summary of Ineffective Policies and Programs *(continued)*

Policies	*Target*	*Risks addressed*[a]	*Evidence*	*Factors for ineffectiveness*
6. Traditional Vocational Education	Universal or underperforming youth in school (type II)	1, 2	Proven ineffective (LAC, United States)	Evaluations suggest that bureaucratic rigidities and outdated curricula have combined to raise questions about the cost effectiveness and relevance of this approach.
7. Constructing Youth Centers without Programming, Services, and Supervision	Universal (types I, II)	1, 3, 4, 5	Proven ineffective	Experience suggests the value of youth centers is derived from the programming rather than the infrastructure. Evaluations find no increase in the use of reproductive health services or knowledge of healthy sexual behavior as a result of youth centers.
8. Abstinence-Only Programs to Prevent STIs and Delay Pregnancy	Universal (types I, II, III)	3 (1)	Proven ineffective (OECD)	Evaluations show no lasting impact on sexual activity or risks. In fact, those who pledge abstinence were less likely to use contraception once they engaged in sex.

Note: a. 1 – School Leaving; 2 – Youth Unemployment; 3 – Risky Sexual Behavior; 4 – Substance Use; 5 – Crime and Violence.

Tyler, Ziedenberg, and Loetke 2006). Research on detained young people shows that they are more likely to be declared delinquent, committed to state institutions, achieve less academically, and be employed more sporadically than their peers who are sentenced to participate in programs that focus on drug treatment, individual counseling, or community service (Homan and Ziedenberg, forthcoming). Fortunately, more effective and less costly alternatives to get-tough programs can be put into place if resources are reallocated properly (see box 9.1).

Box 9.1

The Alternatives to Get-Tough Strategies

A study of the cost effectiveness of California's "three-strikes-and-you're-out" law, which mandates life sentences for repeat offenders, compared that approach to sentencing with a number of other crime-prevention strategies. The study calculated the costs per serious crime prevented of four prevention and intervention strategies:

(i) Early childhood intervention for high-risk families consisting of perinatal home visitation continuing through the first two years of the child's life combined with four years of enriched day-care programs
(ii) Parenting training for families with children who have shown aggressive behavior in school
(iii) Improved public school programs that target all young people
(iv) Early interventions for very young delinquents

The costs calculated for each of these interventions included only direct program costs and did not account for such indirect benefits as the money saved by averting incarceration or preventing victim trauma. The study concluded that the most cost-effective approach for reducing crime is highly targeted parent training, costing less than one-fortieth the estimated cost of preventing serious crime under the three-strikes law. Day treatment and monitoring of delinquent youth are also more cost effective than mandatory sentencing, costing less than one-sixth as much as the three-strikes approach. The least cost effective of the four are early childhood intervention programs and school-based programs that target all students.

However, the exercise did not take into account the fact that early childhood development (ECD) and school-based improvement programs have a wide range

(*continued*)

of other benefits not included in these calculations. In a subsequent analysis, it was found that school-based prevention programs that targeted disadvantaged young people specifically and included incentives (such as cash) for graduating from high school were nearly 10 times as cost effective as the three-strikes approach.

These findings confirm that the prevention of crime is truly more cost effective in the long run than incarceration. Also, the four prevention and intervention strategies combined cost nearly $1.2 billion per year—less costly to implement than the three-strikes strategy alone—and together they could prevent a substantial portion of the 80 percent of serious crimes that are not averted by mandatory sentencing.

Comparative Costs of Preventive Approaches to Crime Reduction (United States)

	Estimated serious crimes prevented number				*Cost per serious crime prevented dollars*			
*Years**	*Early childhood** intervention*	*Parent training*	*School-based*	*Early delinquency*	*Early childhood** intervention*	*Parent training*	*School-based*	*Early delinquency*
1	15,000	0	11,740	1,468	48,000		81,772	51,107
5	75,000	0	23,480	7,338	48,000	N/A	40,886	10,221
10	75,000	35,220	46,960	14,675	48,000	784	20,443	5,111
20	148,375	63,396	58,700	26,415	24,263	435	16,354	2,839
30	221,750	70,440	58,700	29,350	16,234	392	16,354	2,555

Source: Greenwood 1995; U.S. Surgeon General 2001.
Note: All estimates are based on 1992 crime figures and 1990 population figures.
* Years after intervention.
** Crime prevention numbers for first five years include child abuse.

Ineffective Policy 2: Gun Buy-Backs Do Not Reduce Violence and Can Increase the Availability of Guns by Providing a Market for Their Purchase

Evidence from meta-evaluations in the United States indicate that gun buy-backs are a particularly expensive strategy and have consistently been shown to be ineffective in reducing gun violence, including firearms-related homicides and injuries. There is evidence that most guns that are turned in do not work and that most people who turn in guns have other guns at home. These programs have had no significant effect on firearm-related crimes (U.S. Surgeon General 2001).

Ineffective Policy 3: Zero-Tolerance or Shock Programs Used in Both Violence Prevention and Drug Prevention Have Been Shown to Be Ineffective in Numerous Studies

The common program of introducing delinquent young people to prison inmates who describe the brutality of prison life have had either neutral or negative effects in terms of deterring young people from violence (U.S. Surgeon General 2001). Similarly, school-based shock programs have proven to be equally ineffective. For example, the U.S. Drug Abuse Resistance Education program (DARE), which takes a zero-tolerance attitude toward alcohol to scare young people in schools into avoiding substances, has had no preventive impact (Donnermeyer and Wurschmidt 1997; Ennett et al. 1994; Lynam et al. 1999; West and O'Neal 2004). In this program, uniformed police officers come into elementary classrooms to teach students how to resist peer pressure and avoid drugs, gangs, and violence. Despite this demonstrated lack of impact, DARE remains popular with (and funded by) many, including politicians and police who are eager to be seen to be visibly fighting the war on drugs.

Ineffective Policy 4: Boot Camps Have No Significant Negative Effects on Recidivism and May Increase Delinquent and Criminal Behavior

Often used as an alternative to incarceration and described as "rehabilitation" programs, these camps are modeled on military basic training. They tend to narrowly focus on physical discipline, a highly specific personal skill, rather than the broader range of life skills that is included in many of the more effective programs. Boot camps are also a setting in which young people are exposed to other delinquent young people who can act as models and positively reinforce delinquent behavior (U.S. Surgeon General 2001). Many people argue that these programs are shorter term and less expensive than many alternative forms of crime prevention thus signaling that policy makers are tough on crime while meeting the desire of corrections agencies to save money. However, evaluations have repeatedly found that they provide negative returns to both society and to the individual participant (see appendix E) because of their ineffectiveness in reducing recidivism (Greenwood 2006).

Ineffective Policy 5: Nonpromotion to Succeeding Grades and Early Tracking in School Have Had No Demonstrable Benefits

Numerous studies of the effects of nonpromotion have shown that it has negative effects on student achievement, attendance, behavior, and

attitudes toward school, and it can even increase risky behavior and negative outcomes on the part of students (U.S. Surgeon General 2001; World Bank 2006b, 2006e). However, if this type of policy is eliminated and underachieving students are promoted, it is equally important to provide them with the necessary remedial support (World Bank 2006b). Similarly, early tracking or streaming students by differing ability has had equally negative effects. A recent study of 18 countries that compared the performance of these students on standardized international secondary-level tests found that early tracking not only increased educational inequality, but may also negatively affect academic performance (Hanushek and Wösmann 2005).

Ineffective Policy 6: Traditional Publicly Funded Vocational Education Courses Can Be Both Expensive and Ineffective

Most evaluated evidence of traditional vocational education programs has shown that their per-student costs can be twice as high as those of general secondary schooling (Gill, Fluitman, and Dar 2000; Jaramillo 2006; World Bank 2006b). Moreover, these courses tend to be slow to respond to rapidly changing skill requirements in the marketplace and are often poorly targeted. Bureaucratic rigidities and outdated curricula have prompted experts to raise questions about the cost effectiveness and relevance of this approach (National Research Council and Institute of Medicine, 2005). Not all vocational education is ineffective, but a thorough assessment of each country's vocational policies from a cost-effectiveness standpoint should be undertaken to assess whether these resources could be better spent elsewhere. Table 9.2 presents a variety of ways to enhance the employability of at-risk youth, along with cost considerations for each.

Ineffective Policy 7: Constructing Youth Centers Is a Costly Approach to Holistic Youth Development That Has Demonstrated Little to No Effect in Reducing Risky Behavior among Young People

Youth centers exist in nearly every country in the region, ranging from empty buildings to vibrant centers for youth activity. What is clear from the research is that the programming, services, and supervision matter more—and cost less—than the infrastructure. Rather than using scarce resources to construct such centers, it would be more useful to use existing public spaces that are safe (such as schools or other community centers) to provide the types of effective programs discussed in the previous section. Some services, however, seems to work less well than others. A recent survey of

Table 9.2. Enhancing the Employability of Youth at Risk: Comparing Choices

Policies	*Program (country)*	*Approximate unit cost per enrollee*	*Comments*
Traditional Vocational Training[a]	HEART (Jamaica)	1,368	Cost is relatively high. Benefits vary.
	OECS	1,625	
	Regional Average	2,428	
Youth Job Training[b]	Chile Joven (Chile)	700	Can be half the cost of traditional vocational training. Demonstrated effects on wages and quality of employment.
	Juventud y Empleo (Dominican Republic)	750	
	PROJOVEN (Peru)	750	
Educational	Educatodos (Honduras)	100	Potentially cost effective, especially where employer demand for secondary education is high. Impact on wages and quality of employment unclear.
Equivalency and Lifelong Learning[c]	EBA & PREPARA (Dominican Republic)	50	
	HISEP (Jamaica)	150	

Sources: a. Based on McArdle 2004, 2006. b. IADB 2006. c. Estimates drawn from World Bank 2005c, 2006l.

youth centers in Africa showed no increase in the use of reproductive health services by youth or on their knowledge of what constitutes safe practices (Erulkar 2000; WHO 2006a). Moreover, because centers are often used only by a small group of young people for recreational activities, the high cost of these programs has led researchers in Mexico to conclude that youth centers are less cost effective than other community-based programs for reaching youth at risk (Townsend et al. 1987).

Ineffective Policy 8: Abstinence-Only Programs to Prevent the Transmission of STIs and HIV and to Delay Pregnancy Are Unlikely to Be Successful

Abstinence programs have garnered much popular attention, but a survey of published research from developed countries found no evidence that they had any lasting impact on sexual activity or risks (Kirby 2001; World Bank 2006a). In fact, other studies have found that those who pledge abstinence are less likely to use contraception once they start having sex than those who do not pledge (Bruckner and Bearman 2005; Fortenberry 2005).

Dismantling ineffective programs can be difficult because they may continue to be popular even after evaluations have proved that they have no impact. Concerns such as public relations (for example, getting "tough on crime" by incarcerating more people), saving money (for example, boot camps as a less expensive alternative to other treatment programs), or entrenched interests (for example, service providers wanting

to protect their salaries) can all contribute to reinforcing support for ineffective programs. However, evidence of ineffectiveness can also change policy direction and emphasis. In the United States, several states have used meta-analyses of evaluations of a range of crime-prevention strategies to reallocate public expenditures away from get-tough policies and programs toward more cost-effective prevention and treatment approaches, leading to both cost savings and greater impact.

Improving the Portfolio for At-Risk Youth in a Budget-Constrained Environment: Collecting, Analyzing, and Using Data

Because young people are in transition from childhood to adulthood, they are often much more difficult to "capture" in terms of data. This is particularly true of youth at risk, most of whom have dropped out of formal schooling systems, are unemployed, or may not still be living with their parents.

Three principal kinds of information are necessary to design, maintain, and track the progress of a youth portfolio. First, impact evaluation results, program outputs, and program costs are necessary for a cost-benefit and cost-effectiveness analysis. Second, data on the target audience and how to reach them are necessary for a more efficient use of resources. Finally, information about the situation of at-risk youth is necessary to identify areas where young people need more help to avoid or stop engaging in risky behavior.

Impact Evaluation Data, Program Costs, and Program Outcomes for Decision Making based on Cost-Benefit and Cost-Effectiveness Methodologies

Quality monitoring and evaluation systems are essential for improving policy making and, more important, for improving youth outcomes. One of the key difficulties in designing high-impact programs for youth development is the absence of country-specific evidence about what works and what does not work. Thus, billions of dollars are spent worldwide on programs that may have very little effect on risky behavior. In fact, the available evidence shows that many of these well-intentioned programs may actually be *harmful* and costly. This points to the need for better use of data to understand which programs have the biggest impact for each unit of resources invested. The three types of data needed are impact results, program costs, and program outputs.

The collection of impact evaluation data should be a key component of every youth development investment to help policy makers sort out what works, what is harmless but ineffective, and what will actually make the problem worse. The measurement of impact should take into consideration not only the program's primary goal (for example, increased education achievement for equivalency programs), but also its effect in reducing other risky behaviors and negative outcomes.

Impact evaluations can be expensive, and the collection and analysis of data will take time, so upfront planning and incentives are necessary (see box 9.2). The best impact evaluations will collect information on

Box 9.2

Evaluations of Outcomes Are a Fundamental Part of At-Risk Youth Programs

The key to progress in effective policy making is to obtain a solid empirical base that is specific to a given country context. At a minimum, evaluations should include the following five basic design characteristics. Without them, a program's impact is a matter of speculation:

- A description of the sample's demographic characteristics and risk level prior to the intervention.
- A comparison group that has the same (observable and unobservable) characteristics as the treated group. Random assignment is preferable (and often the most ethical).
- A description of the intervention methods applied, including goals and how they should reduce risky behavior/outcomes, the activities involved and method of delivery, and how much exposure over what period of time. Also needed is a measure of "integrity," meaning that what was supposed to be delivered was actually provided.
- Measurement of risky behavior prior to and after the intervention. Additional measurement at six months or more is desirable.
- A quantitative measure of costs and effects.

In addition to these characteristics, qualitative analyses are a good way to gain a deeper understanding of why certain effects are stronger or weaker than others, what gaps may have arisen in the quantitative analysis, and how programs can be improved.

Sources: Tolan and Guerra 1994; World Bank 2006a.

people before they enter a program and collect new data on them after they are likely to have felt the impact of the program. Evaluations will also collect information on similar people who did not participate in the program (a control group) in the period before the program starts and collect new data on them at the same time that the "after" data are collected for the beneficiary group.[1] These data allow for a before-and-after measurement of the group that went through the program (treatment group) and of the control group. It can take quite a long time for the impact of the program to be observable—for example, the effects of ECD programs on juvenile delinquency require 12 years. Furthermore, excluding people from programs can be politically difficult. Thus, it is important to collect the baseline (preprogram) data as early as possible.

In the short run, lessons can be gleaned from programs that have been evaluated elsewhere, as we did in chapter 8 of this study.[2] Appendix F lists the key sources where policy makers can find such information in the absence of evaluation results for their own country.

Program cost data measure the direct and indirect costs of program inputs. The direct costs are the monetary expenditures for purchasing staff time, material inputs, rental space, and other inputs to a youth program. The indirect costs are related to inputs that are not paid for, but that are valuable resources. For example, adult mentors are a key input to youth mentoring programs. The Big Brother–Big Sister program does not pay mentors for their time, but their inputs have a value. Or, funding ECD programs through general taxes will impose a "cost" on other programs that those taxes are *not* funding.

Program output data are also an important part of the equation, and perhaps the most straightforward and commonly collected information. Outputs are the measured results of a program, such as the number of young people who go through *Jóvenes*-style training programs or the number of schools providing sexual and reproductive health instruction. Outputs differ from impacts, where examples of the latter would be the number of youth who found a job as a result of the training or the number of teen pregnancies averted because of the school-based health education.

These three sets of information—impact evaluation results, program costs, and program outputs—are inputs to cost-benefit and cost-effectiveness analyses, which allow policy makers to select the program portfolio that gives the biggest bang for the buck. Just knowing if a program is reaching its intended audience or if it has an impact on intended behavior is not a reason to include it in a country's (budget-constrained) portfolio for at-risk youth. Instead, scarce tax resources should be spent on a particular

strategy or program if the future savings to taxpayers and individuals are greater than the cost of the program. Ideally, we would want to select programs that most reduce risky behavior for a given expenditure.

Two commonly used mechanisms for determining which programs would give the greatest return on investment in the youth portfolio are cost-effectiveness and cost-benefit analyses. The main difference between them is that cost-effectiveness analysis usually denominates benefits in physical units (such as the number of lives saved from a youth-focused HIV program or the number of young people completing school because of a CCT program), whereas cost-benefit analysis denominates benefits in money-equivalent terms (for example, the value of the lives saved from the HIV program or the increase in future earnings of the secondary school graduates).

Cost-effectiveness tools are better used in some circumstances, and cost-benefit estimates are more appropriate in others. Cost-effectiveness is a preferred tool when it is difficult to quantify the costs of an outcome or when the outputs of investment have already been decided. Chapter 3 showed how challenging it can be to measure the monetary benefits of a program intervention because so many benefits of healthy youth behavior are not measurable. In these cases, it may be preferable to measure an outcome that can be compared across interventions, such as the number of teen pregnancies averted, rather than trying to put a monetary value on the benefits of the averted pregnancies. Or, if the decision has been made to influence a certain behavior, such as reducing the number of youth homicides, a cost-effectiveness analysis can be used to compare across different types of programs that affect this outcome.

Cost-benefit analysis can be used to compare the relative value, in monetary terms, across different program outcomes when the costs of achieving a specific outcome can be measured. For example, if policy makers need to decide whether to spend their budget on a media campaign to reduce substance abuse or on hiring job counselors to help students move from school to work, they cannot simply compare outcomes: fewer drug users versus lower unemployment duration. Instead, these outcomes can be quantified and the monetary value of program impacts can be used to determine which expenditure would return the greatest benefit on the investment.

To further illustrate the power of these analytical tools in policy-making decisions, consider an exercise in the United States to identify the most cost-effective means to reduce the chances that a young person will commit crimes (U.S. Surgeon General 2001; Washington State Institute for

Public Policy 1998). The costs to the taxpayer and the crime reduction benefits of 11 programs in the United States were calculated and compared.[3] Six of the programs were prevention programs for young people not yet involved in the criminal justice system.[4] The remaining 5 programs were for young people who were already involved in the juvenile court system. Some were for first- or second-time juvenile offenders, and others were for chronic or serious offenders.

All the programs were shown to be effective at reducing youth crime (from impact evaluation data), but some were more cost effective than others.[5] Table 9.3 shows that all but three of the programs in the table had a greater return to the taxpayer and the young person than the cost of the program (in other words, the value in the last column is greater than 1). However, only four programs had a benefit to the taxpayer that exceeded his or her contribution to funding the program (programs six through nine in table 9.3). Thus, the list of 11 possible programs was rapidly reduced to four. This cost-effectiveness exercise contributed to a shift in policy in many U.S. states away from control strategies and toward a more preventive approach.[6]

Information on costs and benefits is sparse for most at-risk youth strategies in the LAC region. However, there has been a growth in this type of analysis in the United States over the past decade, particularly relating to alternative strategies to reducing youth crime and violence. Many of the evaluations included in this work also measure the impact of the program in question on other kinds of risky behavior. Consequently, the lessons drawn from this experience can provide important guidance for future evaluations in LAC:

- The most effective programs are not always the most cost effective. Programs that are highly successful may also be too expensive to be an option for inclusion in the youth portfolio.
- Such analysis needs to take into account all of the social and economic costs and benefits of a given program. For example, the benefits of quality early childhood development go beyond improved health, nutrition, and education status to include reduced delinquency, teen pregnancy, and incarceration in youth and adulthood, as well as improved employment status and economic returns.
- The most effective programs in the short run may have negative consequences in the long run. For example, youth incarceration may reduce crime in the short term, but the resulting recidivism increases costs to society.

Table 9.3. Cost-Effectiveness Estimates of Youth Violence-Reduction Programs

Age	*Program*	*Estimated cost per participant ($)*	*Benefits per dollar cost($)*	
			Benefits to the taxpayer	*Benefits to the taxpayer and victims*
Early Childhood	1. *Perry Preschool Program:* A two-year preschool educational program in the early 1960s for poor children with weekly home visits by teacher.	13,938	0.66	1.50
	2. *Syracuse Family Development Research Program:* A five-year early 1970s program for low-income, mostly single-parent families with prenatal care, weekly home visits, parent training, childcare, and nutrition.	45,092	0.19	0.34
	3. *Prenatal and Infancy Home Visitation by Nurses*	7,403	0.83	1.54
Middle Childhood	4. *Seattle Social Development Project*: A classroom management and instructional program for grades 1 to 6 with components designed to prevent delinquency and substance abuse.	3,017	0.90	1.79
Adolescent: Nonjuvenile Offender	5. *Quantum Opportunities Program:* A four-year program for disadvantaged high school youth that included mentoring, tutoring, life skills, and financial incentives to graduate.	18,292	0.09	0.13
	6. *Big Brothers–Big Sisters of America:* An intervention that matches a youth with a positive, caring adult volunteer for at least a year.	1,009	1.30	2.12
	Community-based			
Adolescent: Juvenile Offender	7. *Multisystemic Therapy:* An intensive home-based intervention for high-risk juvenile offenders in immediate risk of institutional placement.	4,540	8.38	13.45
	8. *Functional Family Therapy:* A home-based intervention focused on increasing family problem-solving skills and improving interactions among family members.	2,068	6.85	10.99

(continued)

Table 9.3. Cost-Effectiveness Estimates of Youth Violence-Reduction Programs *(continued)*

Age	Program	Estimated cost per participant ($)	Benefits per dollar cost($)	
			Benefits to the taxpayer	Benefits to the taxpayer and victims
	9. *Multidimensional Treatment Foster Care:* A program in which chronic juvenile offenders are placed in a home with trained foster parents, along with other treatment and probation services.*	1,934	14.07	22.58
	10. *Intensive Supervision (probation):* A late 1980s intensive supervision program as an alternative to institutional commitment for non violent felony offenders (Ohio). An intensive supervision program for chronic juvenile offenders with family therapy provided by volunteers, along with community service programs (California).**	1,500	0.90	1.49
	Institution-based			
	11. *Boot Camps:* The combined results of four recent studies of juvenile boot camps in California and in the U.S. cities of Denver, Cleveland, and Mobile.**	–1,964	0.42	0.26

Source: Washington State Institute for Public Policy 1998.

* Costs calculated relative to costs of treatment in a regular group home.

** Costs calculated relative to regular probation.

- The results of any cost-benefit analysis must be fully transparent to ensure accountability and comparability. They are only as good as the underlying evaluation.

Data for Monitoring Progress toward Improving Outcomes

Understanding the current status of today's youth in a particular country and tracking this over time will make it possible to fine-tune the youth portfolio. Table 9.4 presents a set of recommended youth indicators to help governments and practitioners understand, monitor, evaluate, and respond to the challenges facing at-risk youth. The table includes indicators on each of the five kinds of behavior that we have discussed throughout this report, as well as environmental factors that affect youth behavior today or may do so in the future. Indicators for risk type II (engaging in behavior) and risk type III (experiencing the consequences of risky behavior) are both in the table. The last row—environmental factors—makes it possible to quantify those children and young people in the risk type I category.

The indicators have been drawn from a variety of sources. Data on some indicators already exist and can be easily accessed, such as primary and secondary school enrollment rates. Others are not regularly calculated but can be based on information that is regularly collected in LAC via household surveys, demographic health surveys (DHSs), living standards measurement surveys (LSMSs), crime and police statistics, or specifically designed youth surveys. Finally, other variables in the table are not regularly generated, but surveys should be implemented regularly to keep track of these kinds of behavior, such as substance use.

Indicators for at-risk youth need to be disaggregated by income level, rural/urban location, and gender. These distinctions will help policy makers target scarce resources more efficiently. Other suggested key disaggregations are provided in the last column of table 9.4.

Although table 9.4 suggests a set of core indicators, deciding which of these indicators ultimately should be part of a core set will be the prerogative of each country. Appendix D provides a longer list of potential indicators drawn from many sources that can be used to fine-tune the set of indicators best suited to the situation of a particular country.

Data for Targeting Resources to At-Risk Youth

Focusing on youth at risk means targeting, and effective targeting requires reliable data across sectors. To allocate scarce resources effectively, policy makers and practitioners need to know whom they are targeting. Research

Table 9.4. Indicators for Tracking At-Risk Youth

Risk area	*Proposed indicators*	*Characteristics for disaggregation (in addition to income quintile, gender, and urban/rural)*
School Completion and Learning	*School attendance*	
	• School attendance rates	ages 0–3, 4–6, 7–14, 15–17, 18–24
	• Secondary school completion rates	ages 15–17, 18–24
	• Enrollment in education equivalency/literacy courses	ages 15–24
	School completion	
	• Primary, lower, secondary, and upper secondary noncompletion rates among youth*	ages 18–24
	Learning achievement	
	• Scores on language and math test, end of primary	12-year-olds (or equivalent)
	• Scores on language and math test, end of secondary	18-year-olds (or equivalent)
	• Literacy/illiteracy rates	15- to 24-year-olds
Integration into the Labor Force	• Unemployment rates	ages 15–19, 20–24, 25–29
	• Youth-to-adult unemployment ratio	
	• Percentage not at work and not in school	ages 12–17, 18–24
Safe Sex and Sexual Health	*Risky sex*	
	• Average age of first sexual encounter	ages 12–17, 18–24
	• Percentage of sexually active young people engaging in unprotected sex	ages 12–17, 18–24; by marital status
	Fertility	
	• Age at first birth, as share of age cohort	ages 12–17, 18–24; by urban/rural
	HIV/AIDS	
	• Share of youth with AIDS*	ages 11–17, 18–24; adult comparator

Crime and Violence	*Juvenile delinquency**	
	• Number of young people in prison per 100,000 population	ages 15–24, by type of crime; adult comparator
	• Number of juvenile convictions per 100,000 population	ages 15–24; by type of crime; adult comparator
	• % of young people among sentenced prisoners, by crime	ages 15–24
	• Number of young people in gangs per 100,000 population	ages 15–24
	Harm/death from violence	
	• % of homicide victims who are youth	ages 15–24
Substance Use	• Lifetime prevalence of the use of each of the following substances: tobacco, alcohol, marijuana, cocaine, inhalants*	ages 12–17, 18–24
Socioeconomic Conditions of Youth	• Percentage of young people living in poverty*	ages 15–24
	• Percentage of young people living in urban areas	ages 15–24
Environmental Factors	• Population	ages 0–5, 6–10, 11–15, 16–20, 21–25, 26–30
	• Average household income per capita	
	• Proportion of workforce with signed work contract (formal sector)	
	• Number of physicians per 1,000 inhabitants	
	• Share of single-mother households	
•	• Binary—status of country as a major drug supplier, transit or destination country	
	• Share of households receiving social welfare benefits	
	• Vandalism rate	

Source: Authors.
Note: * The indicator is not currently collected on a regular basis in all countries.

shows that the most cost-effective strategies for this population are those that address the specific needs of a particular subset of the youth population. Therefore, it is vital to have the capacity to obtain and analyze reliable and objective youth indicators regularly and consistently.

An effective portfolio of investments in youth at risk must contain policies and programs that target young people in all three risk categories. The targeting mechanisms discussed in chapter 4 can be easily quantified. Targeting prevention programs to children and young people at the type I level of risk requires identifying poor households. Most LAC countries have socioeconomic data that can identify poor households, whether in the form of beneficiary databases for social programs or poverty maps for geographical targeting. Targeting type II young people is also not too difficult, because there are many data sources on risky behavior, including school attendance/dropout records, police records, victimization surveys, and hospital and public health records. Unfortunately, these data are rarely brought together to identify the core set of young people who appear again and again in these databases. A short-run method would be to target those with disciplinary or academic problems in school. Finally, there is much less information, and we have greater trouble finding, type III risk young people—those who have dropped out of formal systems of school and work—yet these are the young people who need the greatest assistance and whose behavior is most costly to society. Ultimately, better data will improve targeting, reduce costs, and improve evaluations significantly.

Assign and Coordinate Institutional Responsibilities Based on Comparative Advantages

As this report has repeatedly pointed out, youth development is a multidimensional task, so it cannot and should not be the responsibility of one actor or one level of government. Many actors are currently involved in youth development in LAC, and coordinating them has been a challenge to those who have been given this responsibility. To facilitate this coordination, to gain the full benefit from the contributions that each has to provide, and to maximize the impact of the youth portfolio, it is essential to assign responsibilities to key actors according to their comparative advantages. The comparative advantage of each actor and their suggested role is summarized in table 9.5 and discussed in the rest of this chapter.

Table 9.5. Proposed Roles in an Investment Strategy for At-Risk Youth Based on Institutional Comparative Advantages

Actor	*Comparative advantages*	*Potential roles*
National Government	• National survey data to better identify and target youth at risk • Technical expertise in youth development and monitoring and evalution (M&E) in relevant line ministries (Education, Health, Labor, Social Protection, Justice, Police, and so forth) • Ability to establish national laws and promote enforcement • Financial resources • Ability to place youth development on a national political and economic agenda • Influence on media messages	*Set broad priorities for investing in at-risk youth, matched with budgetary resources* • Establish broad principles for effective policies and programs • Provide incentives for cross-sectoral collaboration to target at-risk youth and for evaluation of the impact of programs • Establish common targeting mechanisms • Ensure that the budget reflects these priorities in a way that can be monitored *Enable actions at the local level to develop and implement their strategies* • Establish basic guidelines, principles, and legal frameworks for policy making at the local level • Create incentives so local implementing agencies follow the guidelines for efficient and effective youth development and targeting youth at risk • Provide resources and technical assistance to promising programs • Be an independent body for monitoring and evaluating the impacts of local programs
Subnational Governments	• Information about the needs of their population • Close relationship with local organizations (private, public, and nonprofit) • Key providers of public services to young people (schools, health centers, and so forth)	*Develop locally appropriate youth investment strategies that are tailored to the needs of constituents but are within the nationally set principles for good youth policy* • Implement local youth strategies by managing the process to define the nature of programs, identifying and hiring NGOs, supervising the process, and overseeing program and impact data collection • Be the interface between the local level (youth and program implementers) and the national level

(continued)

Table 9.5. Proposed Roles in an Investment Strategy for At-Risk Youth Based on Institutional Comparative Advantages (*continued*)

Actor	*Comparative advantages*	*Potential roles*
		• Collect data that can be used to evaluate the impact of local programs
Private Sector	• Financial and human resources • Source of opportunities (internships, training, work experience)	*Be positive role models and provide opportunities* • Serve as mentors to young people who do not have positive role models • Provide internship, work, and other incentives to at-risk youth to bring them into society
Civil Society	• Information about who needs what types of support services • Personalized support • Already the main implementer of youth programs	*Design and implement programs by and for young people* • Implement programs using public resources and technical advice, within the national, state, and municipal strategic frameworks • Provide inputs and feedback to the governments' strategic plans • Provide oversight to ensure effective use of public funds for youth development
Families and Communities	• The main source of influence on young people • Ability to monitor whether youth at risk are adequately represented and targeted by local, state, and national initiatives	*Create a positive environment for youth* • Participate in programs to strengthen their positive influence on youth • Give feedback to NGOs and local government on the needs of young people and the quality of services provided • Encourage young people to participate in the locally provided programs
Youth	• Key clients and participants in design, implementation, monitoring, and evaluation • Knowledge about the kinds of supports they need and the kinds of incentives they would respond to	*Participate in and provide services for youth development* Help to develop youth strategies, contributing the youth perspective • Participate in the programs and encourage their colleagues to do the same • Implement programs for youth

Source: Adapted from World Bank 2007b.

The central government has the comparative advantage in resources, data, and overarching policy making. In particular, the central government—through its statistical agencies and its line ministries—regularly collects survey and monitoring data and has the capacity to improve this process to collect more and better information on youth at risk, as discussed above. Furthermore, the central government has experience carrying out impact evaluations and can help to collect and evaluate data on the effects of programs. It is not only responsible for setting national laws, but also for providing the resources and incentives for enforcing these laws at the subnational level. Finally, it has the most resources and can use these to create incentives or to support specific initiatives through its line ministries at the subnational and nongovernmental levels.

This comparative advantage suggests that the central government should be responsible for setting broad priorities for youth at risk across all relevant line ministries and for providing the budgetary resources to underwrite actions at the local level. It should put youth development at the center of the broader national political and economic agenda, focusing particularly on the need to reduce duplication of effort, to reallocate resources away from ineffective programs toward those with a proven track record, and to ensure that the expansion of any effective program starts with the poor and those young people who are most at risk. Specifically, via the line ministries, it should establish broad guidelines, principles, and a legal framework for policy making at the local level. On institutional issues, the central government can provide incentives for cross-sectoral collaboration. It can manage monitoring, impact data, and evaluations, and be an impartial body for analyzing the data. Finally, it can allocate funds to other agencies to implement the broad principles.

Subnational governments have the comparative advantage of knowing the needs of their constituents and of the local organizations that can support them. Whereas the central government is better placed to provide overall policies, laws, and financial support, municipal governments have shown themselves to be effective at managing many prevention strategies—particularly those related to violence prevention, as seen in several examples in LAC (see box 9.3). These governments have a close relationship with the public, private, and nonprofit organizations that can best serve the young. They also receive more direct feedback from at-risk youth themselves and are more able than those at the national level to visualize the consequences of not helping this group. Therefore, subnational governments should be responsible for developing youth investment strategies that are within the national priorities but are

Box 9.3

Addressing Youth at Risk at the Municipal Level

In many countries in LAC, a widespread trend toward the decentralization of government administration has led to the delegation of government functions and the allocation of resources to local government. This trend has put pressure on mayors and other municipal authorities to address youth issues on the local level.

It is not surprising that several cities of the region have set up crime-prevention programs on their own initiative. For example, in Colombia, the cities of Cali, Medellin, and BogotÁ applied for and obtained loans to finance public safety and violence-prevention programs. Although the loans to these municipalities are guaranteed by the national government, they were negotiated and will be repaid by the three cities.

Source: Guerrero 2000.

tailored to local needs. They should identify, fund, and work with local institutions to implement these policies, oversee the process, and be the interface between these local institutions and the national government.

The private sector also has a role to play because of its wealth of resources and the opportunities that it offers. Budget-constrained governments cannot address all issues, and the private sector has an incentive to help because a healthy, law-abiding youth population is good for the profits of the private sector. In addition to offering financial resources, the private sector can provide internship and mentoring opportunities, training programs, and employment opportunities, thus making it a key partner in youth development. Its role is thus to provide opportunities and support—through mentoring and being role models—to the at-risk youth population.

Youth-serving NGOs are perhaps the most active in providing direct services to at-risk youth. They know who in the community needs what kind of support and where to find those who are most at risk (type III). Also, they tend to be small and thus can provide individual support, and they are already the main implementer of programs at the grassroots level. They should continue to implement programs at the local level, in line with the national and subnational guidelines, with the financial and technical support of government. They can also provide input and feedback to the central government on their youth priorities and oversee the initiatives that the governments are undertaking.

Families and communities have been identified as the most important influence on young people, and this puts them in a unique position to support youth development. Specifically, families and communities can create more positive home and neighborhood environments. They can give the feedback to NGOs and local institutions that work with youth on the needs of young people and on the quality of the services that they provide. And they can encourage young people to use the support that is available to them.

Finally, and most important, young people themselves can help to develop, implement, and monitor strategies and programs at all levels. Too often, the young are seen as either the problem to be solved or the recipients of a given benefit. In fact, they are the best placed for assessing whether programs or policies have a chance of modifying youth behavior and their expectations of a healthy, productive future. This report has underscored the importance of targeting *at-risk youth*, who are often those with the weakest voice as they generally lack the education, skills, and political connections to make themselves heard. If policy makers make a concerted effort to involve at-risk youth in the design and implementation of interventions from the outset, then these programs are more likely to be effective in steering at-risk youth back to a positive development path and empowering young people to take ownership of their own futures and that of their communities.

Notes

1. See Knowles and Behrman (2003) for a discussion of impact evaluations of youth programs worldwide.
2. Most of the scientific evidence of what works has come out of the United States and Western Europe. Although many of these findings are applicable to the LAC region, there are important differences as well. LAC has charted new territory in select areas (such as conditional cash transfers and Jóvenes training programs) that have revealed important differences from OECD countries. (See appendix F for evaluation sources.)
3. See appendix E for the methodology used in each program analysis.
4. These programs typically try to affect several kinds of risky behavior—for example, teen pregnancy, substance abuse, and academic performance—in addition to preventing future criminal activity. Although both society and young people themselves can benefit in many ways from these programs, the analysis is restricted to measuring crime-related costs and benefits.
5. It should be noted that the comparative analysis took into account the relative likelihood that these programs could produce the same results in

another setting, understanding that success rates were likely to be lower when taken to scale and that not all components would be transferable. This process resulted in more realistic (and reduced) estimates of the expected benefits of each intervention.

6. It is worth noting some drawbacks of this illustrative exercise. First, the exercise measured only the benefits of crime reduction, although many of these programs have benefits that far exceed just those of reducing crime (for example, the ECD and mentoring programs). If, for example, the additional benefits of ECD programs (including educational achievement, increased employment, and reduced substance abuse and risky sexual behavior over the long term) were included in the calculations, it is likely that the ranking of programs would change in important ways. Second, this study is very program specific, and the results are not necessarily transferable to other country contexts, because costs and quality of the specific programs vary substantially. Finally, this study makes only one comparison to the "get-tough" programs that so many states—and countries—are opting for when addressing youth crime (in this case, boot camp).

CHAPTER 10

Investing in Youth in LAC: Key Messages and Conclusions

Youth at risk translate into a society at risk. The time has come for policy makers in Latin America and the Caribbean to invest more strategically in their children and young people, because the opportunities for this generation are greater than ever—but so are its needs. We now have more knowledge about "what works" and a much clearer understanding of the costs associated with neglecting this population. The findings and messages in this report provide a clarion call for policy makers in LAC to invest more strategically in their youth. The final chapter of this book reiterates the key messages, their implications for reforming youth and youth-related policy, recommended next steps, and critical questions for future research.

Key Messages

More than half of the LAC region's youth are at risk. These young people can be classified into three separate groups, with different policy implications for each. The worst off are those who fall into risk type III. These young people are experiencing the harmful effects of risky behavior: they have left school, had children at an early age, started working early, and are addicted to drugs or been arrested for violent behavior. They

come from the poorest households and are the most socially excluded. A second group of young people is classified as risk type II. These young people are engaging in risky behavior – they have started working early, started their sexual lives early—although not as early as those in risk type III—and are in the process of dropping out of school. They are not idle nor have they become parents, but given their behavior, they are on their way to both of those outcomes. Finally, risk type I consists of young people who may feel lonely and isolated but are not engaging in risky behavior. They may be able to withstand the negative influences in their lives, but they may also be learning behaviors that predispose them to graduating to risk types II and III as they age.

The number of youth and youth at risk are expected to grow for at least another generation. By 2025, it is expected that there will be nearly 110 million young people in LAC. Although they will constitute a smaller share of the population than today, they will be larger in absolute numbers, which will have serious consequences for public spending on secondary education, health care, and other services required by the young.

Risky behavior increases dramatically during the youth period. Although adults also engage in risky behavior, the period between childhood and adulthood is a time of experimentation, and it is during these years that risky behavior is likely to begin. In LAC, the teenage years are when many young people drop out of school, become pregnant, and look for their first job. Drug use and violence can begin in childhood or adulthood, but it is during the youth period that initiation peaks. Preventing these increases in risky behavior during adolescence is a major policy challenge.

Risky behavior is starting earlier than in previous generations, and it is more damaging. Today's youth cohort is more educated than earlier generations, but it is engaging in risky behavior at earlier ages and to greater degrees. Teen pregnancy rates are causing concern in the region. Young people's alcohol consumption patterns are reflecting an increase in binge drinking. Rates of idleness and unemployment among young people are higher than ever.

Risky behaviors can have a "contagion" effect: engaging in one risky behavior can lead young people to engage in others. Across the region, young people who engage in one type of risky behavior are often engaged in other kinds of risky behavior as well. In some cases the same underlying factors shape preferences and decision making. For example, a young person who feels socially excluded may feel that he lacks a compelling alternative to risky behavior and may therefore engage in harmful

activities. In other cases, however, there is a clear causal relationship between risky behaviors. For example, a teenager who becomes pregnant may drop out of school and quickly fall into idleness and poverty.

Family, community, and local institutions are the forces that shape young people's decision making. Young people base their preferences and decision making on what they learn in their immediate environment. Public policy often focuses on access to services or information, but the most effective means of reaching young people is through their immediate social networks. More than adults or children, young people value a sense of belonging. Young people who are positively emotionally connected to a parent, teacher, or other adult are less likely to engage in any type of risky behavior. Even though the analyses did not conclusively prove a causal relationship between positive connections with adults and avoidance of risky behavior, the available data indicate that there is a correlation.

Risky behavior by young people costs more than 2 percent of GDP annually in many LAC countries. There are costs and consequences for young people who choose to engage in risky behavior, and also for broader society. Perhaps the biggest cost is the opportunity cost of lost potential: the young person might have become a productive individual and member of society if she or he had not engaged in risky behavior. This rarely measured opportunity cost highlights the degree of underinvestment in youth development. If all young people in LAC were to complete secondary school, the annual GDP of the region would be 2 percentage points higher. Youth violence, which is perpetrated by a small group of young people, has an impact on national budgets equivalent to 1.4 percent of GDP in forgone wealth from the costs of personal injuries, injuries to others, and the destruction of property.

Young people themselves suffer the greatest losses. Like governments, young people also appear to underestimate the costs of their risky behavior. For example, committing an act of violence may impose a small monetary cost on the individual at the time the action is taken. This cost is relatively easy to estimate. It is much more difficult to anticipate the long-term costs to the young person of lost income from time spent in prison. Alternatively, a young woman may not include in her cost calculations the forgone benefits of avoiding risky sexual behavior. An unplanned pregnancy costs a young woman up to 340 percent of per capita GDP over her lifetime from health complications resulting from early pregnancy and lower wages resulting from dropping out of school. Since young people from poor families have a higher incidence

of engaging in risky behavior and of suffering the consequences, these costs are particularly problematic.

LAC policy makers recognize that they have a role to play in preventing risky behavior and providing second chances for at-risk youth, but they still systematically underinvest in this age group. Despite the benefits of investing in youth and despite general agreement that it is a worthy investment, spending on youth development is still very low in the LAC region. By estimating the total cost of risky youth behavior—including both immediate financial costs and opportunity costs—policy makers can design better policies and young people can make more informed decisions.

A core set of factors underpin risky youth behavior. The following six factors underlie virtually all types of youth behavior discussed in this report and should be the focus of policy:

- A positive emotional connection to school is one of the strongest factors protecting against a range of risky behaviors.
- An emotional connection to a parent or another adult also is strongly correlated with avoidance of risky behavior.
- Household income level can have a significant effect on risky youth behavior. Policy makers are increasingly responding by implementing large-scale programs to improve opportunities for poor households.
- Gender roles, the socially constructed rules for males and females, have a profound influence on young people, who are in the process of forming their identities.
- Formal laws can have a significant positive or negative effect on risky behaviors—even laws that are not specifically designed for youth.
- Good mental health—including, for instance, feelings of belonging and ability to manage anger—strengthens the ability of youth to make positive life choices.

Thus, improving well-being of youth in LAC requires not only economic changes, but social, psychological, political, and institutional changes as well.

Defining an Effective Portfolio of Policies and Programs

This report draws on international experience and evidence to identify the most effective policies and programs for preventing and mitigating risky behavior among young people in LAC in the most cost-effective manner. They are classified into three groups:

Preventing or Minimizing Risky Behavior Should Be a Policy Priority

The following policies have been shown to be cost-effective interventions for youth development and are recommended by experts as the core of the youth development portfolio for at-risk youth in any LAC country.

- *Focusing on the first five years of life with integrated early childhood development programs (particularly for children from poor households)*. ECD programs have been shown to reduce all five kinds of risky behaviors discussed in this report. Targeting high-quality health, nutrition, cognitive development, and parenting services to the poorest families and children is necessary to achieve the greatest impact.
- *Incentives that increase the likelihood of secondary school completion*. The completion of secondary school can help reduce all five kinds of risky behaviors among youth. Staying in school provides young people with more knowledge and behavioral skills and increases perceptions of safety and belonging. Individual learning accounts and conditional cash transfers are two successful examples of these types of incentives.
- *School-based prevention and remediation programs*. Sex education classes in schools have been proven to be effective because the young people are a captive audience for the information. These programs are especially effective when they take into account the age and sexual experience of their targeted audience. Programs to train teachers or other school staff in identifying students' health and education deficiencies early, and to guide the young person toward services or special programs to help them overcome these limitations, have been shown to reduce school leaving, risky sexual activity, violence, and substance use.
- *Ensure that health and pharmaceutical services and information are available to youth*. Many young people know how to avoid pregnancy and STIs, but access to health centers, which may be hindered by geographical or psychological barriers, can be increased by funding outreach programs, mobile clinics, and health centers that are sympathetic to the needs of young people.
- *Use of the media for prevention messages (combined with improved services)*. In some countries, the media have been successfully used to reduce risky sexual behavior, violence, and substance abuse. The prevention messages are most effective if they take as a starting point the view of the young person and offer messages that are culturally and socially acceptable.

- *Improved caregiving (including parenting classes and training day-care providers).* Programs that teach parenting skills—positive discipline, parent-child communication, nonviolent coping skills, and nutrition—to parents and guardians of children and young people, especially when combined with financial incentives, encourage adults to make good choices for their children. These programs have been found to reduce all five kinds of risky behaviors.
- *Monitoring indicators to track progress.* Using indicators to track progress in reducing risky behavior is the basis for identifying policies and programs that reduce all five kinds of risky behaviors. It allows policy makers and program coordinators to determine whether the interventions are effective and then to make rapid adjustments to the portfolio to improve its impact.

Second Chance Programs are also a Priority but Need to be Accompanied by Impact Evaluation Before Scaling Up

The portfolio should also include second-chance programs, accompanied by rigorous and consistent monitoring and impact evaluations. Although there are fewer existing impact evaluations on second-chance programs, policy experts have identified a number of promising programs for which there is some evidence of a positive impact.

- *Education equivalency and lifelong learning.* Given the high incidence of early school leaving, remedial education programs offered on a flexible time schedule and appropriate for the needs of their students have yielded positive results in a small number of countries. Receiving an equivalency degree is particularly important to enable young people to enter the labor force. There is some evidence that this kind of intervention affects all five types of risky behaviors in a positive way.
- *A new model for youth job training.* The LAC region has created a set of alternative training programs for at-risk youth, commonly referred to as *Jóvenes* programs, which are implemented by NGOs and the private sector and regulated by the public sector. The *Jóvenes* programs focus on developing the person as a future worker, rather than limiting the training to technical skills. This method has been shown to increase youth employment more than traditional technical and vocational training.
- *Cash transfers for reducing risky behavior.* The opportunity costs to households of keeping children in school increases as the children get

older; offsetting these costs by providing households with cash transfers that are contingent on school attendance have proven effective in several LAC countries. However, there is less evidence on whether this is an effective means to provide incentives for altering other risky behaviors, such as sexual activity or substance use.

- *Supervised after-school programs.* Structured activities in existing public spaces—schools, churches, parks, community centers—are found to reduce a host of risky behaviors in the United States. The evidence from LAC is scarcer, but hopeful.
- *Youth service programs.* Voluntary service programs can give young people work experience and teach them how to be better workers and citizens. The impact of these programs in the United States has been positive, and the anecdotal evidence from LAC is hopeful but has yet to be evaluated.
- *Mentoring.* High-quality mentoring programs have been shown to create a feeling of connection between a young person and an adult, which has a positive impact on all kinds of risky behaviors. Evaluations of the effects of these programs in the United States have been strongly positive.
- *Youth employment services.* Young people usually have difficulties finding employment, so labor intermediation services to help them with their job searches may be a solution. However, there is no evidence on whether these kinds of programs are effective.
- *Life-skills training.* Life-skills training embedded in other youth-oriented programs can teach young people self-concept skills, cognitive skills, and social skills that will help them make better decisions as they grow to adulthood. No rigorous evaluations have been carried out to assess whether these programs are effective, but employer surveys suggest that these skills are highly valued.
- *Specific support to young entrepreneurs*. Although self-employment is the occupational category that employs the lowest share of young people, it may be a necessity in areas with no labor demand. We were able to find only one small program in Peru that supported young entrepreneurs that had been evaluated as having a positive impact. More research needs to be conducted to determine what aspects of these programs are most effective in helping youth at risk to become successfully self-employed.

Selecting General Policies Can Positively Impact Youth

Finally, the portfolio of specific interventions should be complemented with general policies that have a disproportionately positive impact on young people. Youth development is not confined to programs or policies

targeted to young people or their parents, teachers, and immediate friends. More general policies also contribute to the youth portfolio. For example, raising taxes on cigarettes has been shown to have a significant effect on reducing tobacco consumption by older teenagers. Other general policy interventions that have been shown to have a particularly positive effect on young people's behavior include investing in infrastructure in poor communities, reducing the availability of firearms, licensing alcohol distributors, increasing access to contraception, disseminating messages of nonviolence, reforming the justice system, and providing birth registration to the undocumented.

Moving Forward

Improve targeting to maximize impact. Prevention programs, which are the most difficult to target because the young person is not yet engaging in the behavior, are best directed toward children and young people from poor families. Although poverty is not necessarily the main cause of risky behaviors, it is a correlate of all types of risky behaviors and, thus, serves as a good targeting mechanism. Second-chance programs should target early school leavers, who are likely to be engaging in other, unobserved risky behaviors, and should address more than just their educational needs.

Include short-run and long-run policies. The public policy portfolio needs both short-run policies to help those immediately at risk and long-run policies for the youth of the future. As this report has shown, youth development begins from birth, and the preferences, constraints, and information that young people use for decision making are formed by their parents, schools, communities, and society throughout their lives. Too often, though, youth policy targets only those who are currently engaged in risky behavior. A mixed strategy of targeted prevention programs and second-chance programs for young people who are already engaged in risky behavior will allow policy makers not only to cope with the pressures that young people face today, but also to reduce those pressures in the future.

Reallocate resources to support effective youth programs. By reallocating resources away from get-tough programs and toward family counseling, for example, or away from public training institutes and toward community-based training and internship programs, budget spending will be both more efficient and more effective. To more efficiently spend resources, it will also be necessary to invest in information creation, collection, and analysis, which will enhance targeting, identification of

effective programs, and monitoring of progress toward meeting youth development goals.

Recognize the comparative advantages of different actors. Everyone has a role to play in youth development—families, communities, local institutions, young people themselves, all levels of government, and NGOs. The challenge is to identify the needs of the young people and then define the comparative advantages of each of these actors. With this information, governments will be better equipped to recognize the roles of different actors and to identify avenues for support, collaboration, and partnership.

Monitor and evaluate interventions. A good monitoring system is needed to measure progress toward the project's ultimate goals. Rigorous evaluations are also needed to determine what works, when, and in what contexts.

The design and implementation of a youth portfolio that best fits the needs of a specific country requires intensive consultations, consensus building, discipline, phasing, and careful planning. The management of this process is highly context specific and depends on the needs, resources, political environment, and goals of the country. This report offers some tools that may help policy makers to formulate the process, but the work to actually realize the potential of youth has to be carried out at the local, subnational, and country level. It will require hard work and commitment, but the rewards that can be reaped by the young people of LAC and by society at large are enormous.

APPENDIX A

Population in LAC by Age and Sex

Country	Total population	Share of population in each age group	
		Age 0–14	Age 15–24
Antigua and Barbuda			
Both Sexes	69,481	27.3%	15.2%
Male	34,749	27.8%	15.5%
Female	34,732	26.8%	15.0%
Argentina			
Both Sexes	40,301,927	24.9%	16.7%
Male	19,884,139	25.8%	17.2%
Female	20,417,788	24.0%	16.3%
Bahamas			
Both Sexes	305,655	27.0%	18.0%
Male	149,405	27.6%	18.5%
Female	156,250	26.4%	17.5%
Barbados			
Both Sexes	280,946	19.7%	15.2%
Male	135,954	20.3%	15.9%
Female	144,992	19.0%	14.6%

(*continued*)

Country	Total population	Share of population in each age group	
		Age 0–14	Age 15–24
Belize			
Both Sexes	294,385	38.9%	21.3%
Male	149,124	39.2%	21.4%
Female	145,261	38.7%	21.1%
Bolivia			
Both Sexes	9,119,152	34.3%	21.5%
Male	4,510,991	35.3%	21.9%
Female	4,608,161	33.2%	21.0%
Brazil			
Both Sexes	190,010,647	25.3%	17.3%
Male	93,871,956	26.2%	18.4%
Female	96,138,691	24.6%	17.5%
Chile			
Both Sexes	16,284,741	24.1%	17.0%
Male	8,067,977	24.9%	17.5%
Female	8,216,764	23.4%	16.5%
Colombia			
Both Sexes	44,379,598	29.8%	17.8%
Male	21,751,256	30.8%	18.2%
Female	22,628,342	28.9%	17.3%
Costa Rica			
Both Sexes	4,133,884	27.8%	19.3%
Male	2,087,267	28.1%	19.6%
Female	2,046,617	27.4%	19.1%
Dominica			
Both Sexes	72,377	25.6%	17.9%
Male	36,464	26.0%	18.1%
Female	35,913	25.2%	17.7%
Dominican Republic			
Both Sexes	9,365,818	32.1%	18.8%
Male	4,752,171	32.3%	19.0%
Female	4,613,647	32.0%	18.7%
Ecuador			
Both Sexes	13,755,680	32.6%	19.5%
Male	6,884,469	33.2%	19.9%
Female	6,871,211	32.0%	19.2%
El Salvador			
Both Sexes	6,948,073	36.1%	19.5%
Male	3,382,839	37.9%	20.1%
Female	3,565,234	33.6%	19.0%

Country	Total population	Share of population in each age group	
		Age 0–14	Age 15–24
Grenada			
Both Sexes	89,971	32.8%	24.6%
Male	46,751	31.8%	24.3%
Female	43,220	33.9%	24.9%
Guatemala			
Both Sexes	12,728,111	40.8%	21.3%
Male	6,281,356	42.0%	21.5%
Female	6,446,755	39.7%	21.2%
Guyana			
Both Sexes	769,095	26.1%	18.4%
Male	385,707	26.5%	18.8%
Female	383,388	25.6%	18.0%
Haiti			
Both Sexes	8,706,497	42.1%	22.0%
Male	4,294,297	43.0%	22.4%
Female	4,412,200	41.2%	21.6%
Honduras			
Both Sexes	7,483,763	39.3%	21.3%
Male	3,761,676	39.9%	21.6%
Female	3,722,087	38.7%	21.0%
Jamaica			
Both Sexes	2,780,132	32.5%	21.1%
Male	1,374,310	33.5%	21.3%
Female	1,405,822	31.7%	20.9%
Mexico			
Both Sexes	108,700,891	30.1%	18.9%
Male	53,238,464	31.4%	19.3%
Female	55,462,427	28.9%	18.5%
Nicaragua			
Both Sexes	5,675,356	35.5%	22.1%
Male	2,839,168	32.2%	22.4%
Female	2,836,188	34.8%	21.8%
Panama			
Both Sexes	3,242,173	30.0%	17.8%
Male	1,637,699	30.3%	18.0%
Female	1,604,474	29.7%	17.6%
Paraguay			
Both Sexes	6,669,086	37.2%	18.7%
Male	3,351,627	37.7%	18.7%
Female	3,317,459	36.8%	18.7%

(*continued*)

Country	Total population	Share of population in each age group	
		Age 0–14	Age 15–24
Peru			
Both Sexes	28,674,757	30.3%	18.9%
Male	14,429,255	30.7%	19.0%
Female	14,245,502	30.0%	18.7%
St. Kitts and Nevis			
Both Sexes	39,349	27.2%	18.2%
Male	19,551	28.0%	18.4%
Female	19,798	26.4%	17.9%
St. Lucia			
Both Sexes	170,649	29.4%	19.7%
Male	84,184	30.7%	19.7%
Female	86,465	28.0%	19.4%
St. Vincent and the Grenadines			
Both Sexes	118,149	25.9%	19.3%
Male	60,213	25.9%	19.5%
Female	57,936	25.9%	19.1%
Suriname			
Both Sexes	470,784	28.0%	18.5%
Male	233,962	28.7%	18.5%
Female	236,822	27.4%	18.5%
Trinidad and Tobago			
Both Sexes	1,056,608	19.5%	19.4%
Male	545,732	19.4%	19.6%
Female	510,876	19.6%	19.2%
Uruguay			
Both Sexes	3,460,607	23.0%	14.9%
Male	1,684,273	24.0%	15.6%
Female	1,776,334	22.0%	14.2%
Venezuela			
Both Sexes	26,023,528	31.6%	18.6%
Male	12,877,503	32.4%	18.8%
Female	12,146,025	33.3%	19.8%
France			
Both Sexes	63,718,187	18.6%	12.6%
Male	31,139,294	19.5%	13.2%
Female	32,578,893	17.7%	12.1%
United States			
Both Sexes	301,139,947	20.2%	14.2%
Male	148,006,279	21.0%	14.8%
Female	153,133,668	19.4%	13.6%

Source: U.S. Bureau of the Census International Database http://www.census.gov/ipc/www/idb/.

APPENDIX B

Methodology for Estimating the Cost of Negative Youth Behavior

Depending on who they affect, the costs of risky youth behavior can be divided into two types:

(i) **Individual costs**, which are those costs that are paid by the person engaging in the negative behavior. For example, in the case of early school leaving, one form of individual cost is the person's forgone earnings from having only a limited amount of schooling.
(ii) **Social costs**, which are those costs that are paid by society. In the case of early school leaving, two examples are the lower contributions that school dropouts will make to tax revenue and the higher likelihood that they will need to use the social safety net relative to those who stay in school.

Depending on their nature, the costs of risky youth behavior can be divided into two types:

(i) **Financial costs**, also referred to as monetary costs, which are those costs that are paid in money or through debt issuance by either the individual or society and typically appear as line items in government or household budgets.

(ii) **Economic costs**, also referred to as opportunity costs, which are those costs that are paid by either the individual or society in the form of the forgone value of a productive resource or a forgone profitable investment opportunity.

The methodology for estimating the costs of the consequences of early school leaving is presented in this appendix. The costs of the consequences of other risky behavior (such as teen pregnancy, sexually transmitted diseases, alcohol and drug abuse, and violence) can be quantified in a similar way, since many of them entail costs that accrue over the lifecycle and need to be accounted for using the net present value formula. These other costs are estimated using a methodology based on the multiplication of the prevalence of the negative consequences of risky youth behavior (in other words, the number of cases in a given population) and the unit costs of these negative consequences. The prevalence is typically obtained from survey data and administrative records, while the unit cost estimates are calculated using the net present value formula when they entail multiperiod costs.

Individual Financial Costs

Early school leaving typically represents individual financial savings (in other words, negative financial costs) for the household. Although public education is tuition-free in most LAC countries, there are a number of significant out-of-pocket expenditures associated with schooling, including meals, uniforms, textbooks, other class materials, and contributions to school funds.[1] In fact, these financial costs are one of the main reasons why households decide to take their children and youth out of school, along with the opportunity cost involved in keeping their children in school instead of working at home or in the labor market. In response to this situation, several countries in LAC have implemented conditional cash transfer (CCT) programs, which compensate households for the income that they forgo by keeping their children in school. Taking these considerations into account, one can express the individual financial cost to the household of early school leaving as:

$$C_i = \sum_j = \ln\,(x_{i,j}) - B_i$$

where $x_{i,j}$ is a vector of the costs, $j = 1, \ldots, n$, associated with schooling for individual i, and B_i is the value of the cash or in-kind benefit that the household receives from CCT programs provided that their children

attend school regularly. C > 0 in countries without CCT programs that are associated with school attendance, but where there are other significant costs to the student. The sign is indeterminate in countries with cash or in-kind transfer programs. Given the scarcity of data on the $x_{i,j}$ vector, individual financial costs are not estimated in this exercise.

Individual Opportunity Costs

As argued in the report, leaving school early entails a cost because the person's lifetime earnings will be lower because he or she has a lower level of schooling than if he or she had finished school. In the case of a young person who decides to drop out of high school, for example, this cost is equal to the net present value of the earnings differential between an average high school graduate and an average high school dropout. Also, high school dropouts may have a higher risk of unemployment, lower labor force participation rates, and fewer hours of work than people with a full high school education. If so, the earnings of high school dropouts would be lower than those of high school graduates because of lower wages, lower labor supply (because of lower participation, higher unemployment, or fewer hours worked), or a combination of these. Furthermore, it is probable that high school graduates will continue their education through college and, thus, will have higher lifetime earnings associated with this higher level of education. Using these concepts, one can estimate the individual opportunity cost of dropping out of high school as:

$$\sum_{t=1}^{T}\left[\frac{w^{hs}-w^{drop}}{(1+r)^{t}}\right]-\Pr(College|HS)\times\sum_{t=1}^{T}\left[\frac{w^{college}-w^{hs}}{(1+r)^{t}}\right]$$

The first term is the net present value of the difference between the average earnings of a high school graduate (w^{hs}) and a high school dropout (w^{drop}), r is the discount factor, and T is the expected working lifetime. The second term is similar, except that the difference is between average earnings of a college graduate ($w^{college}$) and a high school graduate (w^{hs}), weighted by the probability that a high school graduate will attend college, Pr($College|HS$), which is estimated using the fraction of high school graduates who attend college. The parameters of this model are set to 5 percent for the discount rate and 45 years for the length of the working life, and it assumed that the wage differences remain constant throughout an individual's lifetime. While it is well known that age-earnings profiles are increasing and concave, this assumption is used to simplify the calculation and does not affect the conclusions.

Social Financial Costs

An individual's decision to leave school early imposes some financial costs on the government but also yields some savings. On the savings side, governments will have lower expenditures since they no longer need to apportion resources to provide free public education to the individual. On the costs side, governments may need to finance vocational training programs for the dropout, costs that they would not have had if the individual had accumulated sufficient skills in formal schooling. Alternatively, the government may have to pay unemployment insurance benefits and other social safety net benefits to the dropout. Thus, the total financial costs to the government are:

$$CG = \textit{(cost per capita of training)} \times \textit{Pr(unemployed youth enters training)} + \textit{(cost per capita of UI)} \times \textit{Pr(unemployed youth are eligible and collect)}$$

Given the limited data that exist on the training costs and savings at the margin, the absence of information on the share of unemployed young people who enter training owing to unemployment, and to the limited availability of unemployment insurance programs in the LAC region, we have not estimated the financial costs to governments of school dropouts.

Social Opportunity Costs

When individuals drop out of school early, they impose an opportunity cost to society from the forgone higher productivity that they would have had if they had completed their education. By not dropping out of school, individuals would have produced more of value when in labor force. That lost value is the opportunity cost to society. Assuming that wages are equal to the value of the marginal productivity of labor, we can proxy this opportunity cost by the net present value of the difference in lifetime earnings for graduates and dropouts. This is similar to the opportunity cost to the individual with one main difference: the opportunity cost to the individual is the total take-home pay that is forgone, in other words, earnings after taxes. In contrast, the opportunity cost to society includes the value of those taxes, since the value of the marginal productivity is equivalent to total earnings, not just after-tax earnings. Thus, the equation to estimate the opportunity cost to society is similar to that for the opportunity cost to the individual but is adjusted for the gross earnings (w_{gross}):

$$\sum_{t=1}^{T}\left[\frac{w_{gross}^{hs}-w_{gross}^{drop}}{(1+r)^{t}}\right]-\Pr(College|HS)\times\sum_{t=1}^{T}\left[\frac{w_{gross}^{college}-w_{gross}^{hs}}{(1+r)^{t}}\right]$$

Components of the Cost Estimates for Each Kind of Risky Youth Behavior

1. Individual Financial Costs

- *Dropping out of school*. As discussed above, the individual financial costs of dropping out of school are the financial savings (in other words, negative financial costs) that result from not having to cover tuition and other out-of-pocket expenses associated with attending school. Since no easily accessible data are available on these costs, they are not included in our calculations.
- *Joblessness.* Individual financial costs involve the costs of searching for a job (living costs should not be considered, as they would have to be covered even if the person was working or in school). These costs are not included, either, since data on them are also not available.
- *Teen pregnancy*. The individual financial costs include the out-of-pocket expenses of medical care associated with the pregnancy (whether full term or interrupted) as well as the costs of any possible health complications for the mother. The costs associated with medical care are included in the calculation.
- *Sexually transmitted diseases*. The individual financial costs include the out-of-pocket expenses of medical treatment and care. The costs associated with medical treatment and care of HIV/AIDS and Herpes Simplex Type II (HSV2) are included in the calculation.
- *Alcohol, tobacco, and substance use*. The individual financial costs include the out-of-pocket expenses of acute and chronic medical treatment and rehabilitation associated with alcohol, tobacco, and drug use, as well as the legal and medical expenses associated with alcohol and drug-related accidents, personal injuries, injuries to others, and property damage. These costs are included in calculations.
- *Violence*. The individual financial costs are the out-of-pocket legal and medical expenses related to personal injuries, injuries to others, and property damage. These costs are included in the calculations.

2. Individual Opportunity Costs

- *Dropping out of school*. The individual opportunity cost is the forgone lifetime earnings associated with the completion of a higher schooling level. These costs are calculated using the net present value formula and the parameters described above and are included in the calculations.
- *Joblessness.* The individual opportunity cost is obtained by multiplying the difference in unemployment rates between different levels of

schooling multiplied by the average earnings for the corresponding lower schooling level, which is used as a proxy of the opportunity cost in case a person is unemployed. If the unemployment rate associated with a lower level of schooling is actually lower, then dropping out of school would be associated with a negative individual opportunity cost. These costs are included in the calculation.

- *Teen pregnancy*. The individual opportunity costs include the forgone lifetime earnings associated with a higher schooling level in case the pregnancy results in the teenage mother or father dropping out of school. These costs are included in the calculation using the same formula described for calculating the costs of dropping out of school.
- *Sexually transmitted diseases*. The individual opportunity costs include the costs associated with premature death and lower productivity at work due to the disease. The costs of premature death and lower productivity at work associated with HIV/AIDS and Herpes Simplex Type II (HSV2) are included in the calculation.
- *Alcohol, tobacco, and drug use*. The individual opportunity costs of alcohol, tobacco, and drug use include the costs associated with premature death and lower productivity at work. These are included in the calculations.
- *Violence*. The individual opportunity costs associated with personal damage are premature death and lower productivity at work, while, in the case of injuries to others and property damage, the costs are the forgone lifetime earnings associated with incarceration. These are included in the calculations.

3. Social Financial Costs

- *Dropping out of school*. The social financial costs of dropping out of school are the financial savings (in other words, the negative financial costs) that result from not having to provide free public education and other expenses associated with the provision of school services. Since no easily accessible data are available on these costs, they are not included in our calculations.
- *Joblessness*. The social financial costs involve the costs of providing vocational training for the unemployed and the costs associated with unemployment insurance and any other government provided assistance to the unemployed. These costs are not included either, since data on them also are not readily available.
- *Teen pregnancy*. The social financial costs include the expenses to the public treasury of medical attention associated with the pregnancy

(whether full term or interrupted) as well as the costs of any possible health complications for the mother. The costs associated with medical attention are included in the calculation.

- *Sexually transmitted diseases*. The social financial costs include the cost expenses to the public treasury of any medical treatment. The costs associated with medical treatment and care of HIV/AIDS and Herpes Simplex Type II (HSV2) are included in the calculation.
- *Alcohol, tobacco, and drug use*. The social financial costs include the costs to the public treasury of acute and chronic medical treatment and rehabilitation associated with alcohol, tobacco, and drug use, as well as the government's legal and medical expenses associated with alcohol and drug-related accidents, personal injuries, injuries to others, and property damage.
- *Violence*. The social financial costs are the costs to the public treasury of any legal and medical expenses related to personal injuries, injuries to others, and property damage.

4. Social Opportunity Costs

- *Dropping out of school*. The social opportunity costs of dropping out of school are the forgone lifetime gross earnings (including taxes) associated with completing a higher schooling level. These costs are calculated using the net present value formula and the parameters described above and are included in the calculations.
- *Joblessness*. The individual opportunity cost is obtained by multiplying the difference in unemployment rates between different levels of schooling multiplied by the average gross earnings (including taxes) for the corresponding lower schooling level, which is used as a proxy of the social opportunity cost in case a person is unemployed. If the unemployment rate associated with a lower level of schooling is actually lower, then dropping out of school would be associated with a negative social opportunity cost. These costs are included in the calculation.
- *Teen pregnancy*. The social opportunity costs include the forgone lifetime gross earnings (including taxes) associated with a higher schooling level in case the pregnancy results in the teenage mother or father dropping out of school. These social costs are included in the calculation using the same formula described for calculating the costs of dropping out of school.
- *Sexually transmitted diseases*. The social opportunity costs include the costs associated with premature death and lower productivity at

work owing to the disease. The costs of premature death and lower productivity at work associated with HIV/AIDS and Herpes Simplex Type II (HSV2) are included in the calculation.

- *Alcohol, tobacco, and drug use*. The social opportunity costs of alcohol, tobacco, and drug use include the costs associated with premature death and lower productivity at work. All of these social opportunity costs of substance abuse (alcohol, tobacco, and drug use) are considered in the calculations.
- *Violence*. The social opportunity costs associated with personal damage are premature death and lower productivity at work, while, in the case of injuries to others and property damage, the costs are the forgone lifetime earnings associated with incarceration plus the government's costs associated with the justice and penitentiary systems.

APPENDIX C

Methodology for Devising the Typology of At-Risk Youth

To understand heterogeneity among the youth population, we used cluster analysis to identify different groups of young people based on the observable elements. Cluster analysis is a method for identifying correlations in large data sets, but it requires a minimum amount of priors on the structure of the data. Observations are grouped based on minimizing a distance measure between each variable for each observation. The observations in a cluster share a set of common variables. By comparing the mean values of various variables across clusters, we were able to characterize each cluster.

The advantage of cluster analysis is that the only priors required are in the variable construction, such that they range between 0 and 1. For continuous variables, the value was normalized:

$$x = \frac{y}{y_{\max}}$$

We assigned binary variables a 0 or 1 and discrete variables a value between 0 and 1 based on the ordering of the responses. A variable takes a value closer to 1 the more that it captures the concept being described. For example, the variable "abuse" takes a value of 1 if there is abuse in the household and a 0 if there is none, while the variable

"parental connectedness" takes a value of 1 if the respondent feels that she relates to her parent and a value of 0 otherwise. Variables that could not be ordered in a logical way were not included in the analysis.

We used Ward's method (minimum-variance) of clustering since it provided the most distinct and interpretable clusters.[1] Ward's method uses the error sum of squares criteria.[2] The variance is minimized by calculating the sum of squared errors from the mean of the cluster for each of the variables for each observation:

$$W = \sum_{k} \sum_{j} \sum_{i} (x_{ijk} - \bar{x}_{jk})^2$$

$i = 1, \ldots, n$ observations, $j = 1, \ldots, m$ variables, and $k = 1, \ldots, l$ clusters

Initially, each of the n observations forms its own cluster. The first merge is identified by calculating the sum of squares for each pair of clusters. The pairing with the smallest sum of squares is identified, and those clusters are joined, leaving $n - 1$ clusters. The second grouping calculates the sum of squared errors again and pairs the two clusters that have the smallest value, leaving $n - 2$ clusters. The process is repeated until all observations are clustered together into one group, or until the researcher determines that the optimal number of clusters has been reached.

We used three tools to determine the optimal number of clusters. First, stop commands following either of two possible rules (Calinski and Harabasz pseudo-F index or Duda and Hart Je(2)/Je(1) index) provided a guide as to the optimal number of clusters.[3] The Calinski and Harabasz method suggests the optimal number of clusters (g) that maximizes an index C(g), which uses the pooled within-cluster covariance matrix (W) and the between-cluster covariance matrix (B), where:

$$C(g) = [\text{trace } (B)/(g - 1)]/[\text{trace } (W)/(n - g)]$$

The Duda and Hart method maximizes D(g):

$$D(g) = Je(2)/Je(1)$$

where Je(2) is the sum of the within-cluster sum of squared distances between the objects and centroid if the cluster is split into two, and Je(1) is the within-cluster sum of squared distances to find a local criterion. This result can then be combined with test statistics for each local criterion to suggest the optimal number of clusters. Larger values from both methods indicate that the clusters are more distinct from each other, while lower values indicate that the clusters are not very different from each other and therefore not very interesting.

We used dendrograms to select among the multiple "right" answers that the other methods can give. Dendrograms graphically depict the hierarchical relationship between the clusters by showing the order in which clusters are merged as well as the distance between the clusters. At each level of the cluster formation process, a dendrogram can be generated to view the relationships between the clusters. The dendrogram changes as clusters are grouped and ungrouped, thus enabling the researcher to choose the optimal clustering level.

Once the optimal number of clusters was suggested and the dendrograms generated, we observed the clusters themselves and compared the means of the variables across clusters. We then used the differences found between the different clusters to determine the optimal number of clusters. For instance, if five clusters were suggested, six clusters were investigated to see if there was an interpretable difference. If not, five clusters were used, but if so, six clusters were used (this process could then be repeated).

Although the objective of a cluster analysis is to identify which variables move together, we treated some variables endogenously and others exogenously. For example, one hypothesis is that poverty status is a good indicator for a youth being "at-risk." If we had used this variable to create the clusters, it was possible that poverty would be such a strong factor that it would drive the clusters and would render the other variables meaningless. Thus, for these types of variables, we carried out the analysis treating them as both endogenous and exogenous and found little difference. We thus report only the results for treating them exogenously.

Notes

1. There are many different ways to perform cluster analysis, and no particular method is considered the best. Ward's linkage cluster analysis is a commonly used agglomerative hierarchical method.
2. An attractive feature of the Ward's method is that it performs well with groups that are of unequal size, which, as will be shown in the results, strongly characterized these data. See Everitt et al. (2001) for a theoretical discussion of cluster analysis and Ward's criterion. See Cunningham and Maloney (2001) for an application.
3. These two methods are implemented in STATA. They were identified as the two best methods available (out of 30) by Milligan and Cooper (1985) and are discussed in Everitt et al. (2001).

APPENDIX D

Measuring Youth Outcomes

Various publications and data sources recommend which indicators to use to evaluate the lives of young people. While the focus is not on at-risk youth *per se*, many of the indicators can be used for this population by applying what was learned in this report, which is that young people from poor families are also those who are most at risk. Thus, by disaggregating the indicators by income level, gender, and urban/rural location, we can monitor how those at the greatest risk of falling behind are faring.

The indicators in the attached table are drawn from six sources, and each indicator is identified regarding the source from which it was drawn. The six sources are:

(1) *World Development Report 2007: Development and the Next Generation* (World Bank, 2006a)
(2) Youth in Numbers: Latin America and the Caribbean (World Bank, 2004)
(3) Youth Well-Being Index in Brazil and the U.S. (Dabalsco et. al., 2007)
(4) *La Juventud en Latinoamérica: Tendencia y Urgencias* (CEPAL, 2004b)
(5) Eighth UN Survey on Crime Trends and the Operations of Criminal Justice Systems (UNOCD, 2001–1002)
(6) Databases from other UN agencies.[1]

The table is presented to aid policymakers in selecting indicators that are best suited for their own country. Many of the UN data are generated annually, thus making it easy to use these indicators. Others are generated only periodically, and thus it is the responsibility of the country's statistical agency to begin tracking these numbers.

For each indicator in the table, there is a note directing the reader to a suggested age range and to other disaggregations that should be carried out if that indicator is selected.

Risk area	*Proposed indicators*	*Note*
School Completion and Learning	School attendance • School enrollment: Net Preschool, Gross and Net Primary, Gross and Net Secondary, Gross tertiary (1, 2, 4, 6) • School attendance rates of ages 0–3, 4–6, 7–14, 15–17, 18–24 (3) • Enrollment in education equivalency/literacy of 15–24 year olds (4)* • Ratio of girls to boys in secondary education (ratio) (6)	By gender
	School completion • Estimated school life expectancy (2)* • Primary, lower, secondary, and upper secondary completion rates among youth (1, 2, 3) • Primary, lower, secondary, and upper secondary noncompletion rates among youth* • Average years of education of the 14-year-old population (3)*	By gender
	Learning achievement • End-primary and end-secondary: Score on language test, 8th grade; score on math test, 8th grade; score on language test, 11th grade; score on math test, 11th grade (3) • Literacy/Illiteracy rates of 15–24 year olds (2, 3, 4, 6) • Functional illiteracy of 15–24 year olds (less than 4 years of study)* (4)	By gender
Employment and Integration into the Labor Force	Economic Activity • Economically active population rate (total) (2, 6) • Labor force participation rates (1, 2, 6) • Unemployment rates (1, 2, 6) • Youth-to-adult unemployment ratio (2, 6) • Female-to-male youth unemployment rate (6)	 By age cohorts*, by gender By gender, adult comparator By gender, for rural and urban youth

(*continued*)

Risk Area	*Proposed Indicators*	*Note*
	• Employment to population ratio, by age (6)	
	• Percentage not at work and not in school, ages 10–17 and 18–24 (1, 3)	
	• Incidence of child labor (1, 6)	By gender
	Nature of employment	
	• % youth (ages 16–24) working with formal contract (3, 4)*	
	• % youth (ages 16–24) working with one or more benefits (4)*	
	• % youth in domestic activity (4)*	
Safe Sex and Sexual Health	Sexual Initiation	
	• Age of first sexual encounter (4)	
	• Use of contraceptive in first sexual encounter (4)	
	Risky Sex	
	• Percentage of sexually active youth engaging in unprotected sex (1, 2)	
	• Percentage of sexually active youth who used a condom in last high-risk sex (2)	By gender and by marital status
	• Percentage of sexually active youth who use any contraceptive methods (2, 4)	
	• Age of first marriage, as share of age cohort (2)	By gender, by age, by urban/rural
	Fertility	By age (12–17), by urban/rural
	• Age-specific fertility rates (1, 2, 4)	
	• Percentage of young women giving birth before 18 (1, 2, 4)	By age, by urban/rural
	• Percentage of young women using antenatal care (1)	
	• Age at first birth, as share of age cohort (2)	

	HIV/AIDS
	• Percentage of youth ages 15–24 with knowledge of how to prevent HIV/AIDS (1, 6)
	  • % youth ages 15–24 that knows a condom can prevent HIV/AIDS (6)
	  • % youth who know healthy-looking people can be infected with HIV (2, 6)
	  • % youth who can identify two protection measures and reject three misconceptions (2)
	  • % female youth (ages 15–24) who know a place to get tested (2)
	  • % female youth (ages 15–24) who have been tested (2)
	  • % female youth who have been informed on test results (2)
	• HIV prevalence among pregnant women (ages 15–24) (%) (6)
	• Share of youth with AIDS (3) for ages 11–17 and 18–24, (6) for ages 15–24
	• HIV/AIDS prevalence among pregnant women ages 15–24 (2)
		
		By gender
		By gender
		By gender, adult comparator

Crime and Violence	Juvenile Delinquency • Number of youth (15–24) in prison per 100,000 population (5) • Number of youth in pre-sentence detention, per 100,000 population (1) • Number of convicted juveniles admitted to prison on a selected day (2, 6) • Number of juvenile arrests per 100,000 population (2, 5) • Number of juvenile convictions per 100,000 population (2, 5, 6) • Number of juvenile convictions for homicide per 100,000 population (3,5) • % of youth among arrestees by crime (5) • % of youth among sentenced prisoners by crime (5) • Number of youth in gangs per 100,000 population (5) • Binary – Presence or absence of youth gangs (5) • % of juveniles placed on probation on a given day (6) Harm/death from violence • % of youth in trauma admission (5) • % of homicide victims who are youth	By gender, by type of crime, adult comparator

(*continued*)

Risk Area	*Proposed Indicators*	*Note*
Substance Use	Tobacco use • % youth who currently use any tobacco product (2, for ages 13–15) • % youth who currently smoke cigarettes (2, for ages 13–15) • % youth who are current smokers and smoke >6 cigarettes per day (2, for ages 13–15) • % youth ages 12–17 who have used tobacco (3)*	By gender
	Drug use (3, 6, available mostly for developed countries) • % youth ages12–17 who have used alcohol, marijuana, cocaine, inhalants (3)* • Lifetime prevalence of cannabis, ecstasy, cocaine, heroine, inhalant abuse among youth (%) (6)	By gender
Other Indicators	Citizenship • Percentage of youth without identity papers (1) • Percentage of youth who have worked together with someone else or some group to solve a problem in the community where they live (1) • Percentage of youth who correctly answer a question concerning political knowledge appropriate to the country (1) • Share of youth as registered voters (4) • Share of 16–17 year olds who vote (3) • Share of youth who have voted in past elections (4) • Share of youth affiliated to a political party (4)	By gender*
	Migration • Percentage of youth studying abroad (1) • Percentage of youth working abroad (1) • Percentage of youth migrants returning within 10 years of migrating (1)	By gender*

General Health • Body mass index • Percentage of 15-year-olds who will die before reaching their 60th birthday Percentage of young people who have used the Internet in the past month (1)	By gender*

Socioeconomic conditions of youth
• Youth affiliation to social protection programs (4)*
• Youth ages 15–24 as head of household (4)*
• Percentage of youth ages 15–24 living in poverty (by quintile) (4)*
• Percentage of youth ages 15–24 living in urban areas
• Percentage of youth ages 15–24 living without (4)*
  • Refrigeration
  • TV
  • Phone lines
  • Internet access
	By gender, youth-to-adult ratio

General Socioeconomic Conditions • Population (2, 6) • Share of population below the poverty line (3) • Average per capita household income (3) • Proportion of workforce with signed work contract (formal sector) (3) • Number of physicians per 1,000 inhabitants (3) • Share of single mother households (3) • Binary – Status of country as a major drug supplier, transit, or destination country (5) • Share of households receiving social welfare benefits • Vandalism rate (5)	 By age and gender By age and gender

* The indicator is not currently collected on a regular basis in all countries.

Note

1. The sources include: Human Development Report (UNDP HDR); State of the World Population (UNFPA SOWP); ILO Global Employment Trends for Youth GET Model, 2004 (ILO GET); State of the World's Children (UNICEF SOWC); ILO LABORSTA database; World Population Prospects 2004 Revision (DESA WPP); UNDESA, World Urbanization Prospects 2003 Revision (DESA WUP); UNESCO Statistical database; and UNODC, Youth and drugs: a global overview, E/CN.7/1999/8 (UNODC 1999). Some of the indicators, particularly for crime and violence, are only available for developed countries, but these can be used for comparative purposes as countries in the Latin American and Caribbean region improve their data collection and analysis.

APPENDIX E

Estimated Taxpayer Costs and Crime-Reduction Benefits of 16 Crime Prevention Programs

Name of intervention and quality of research design (H = high; M = medium; P = preliminary)		Program's effectiveness for reducing felonies in Washington: Type of offenses measured	Without program, the no. of offenses per person	With program, the no. of offenses per participant	Percent change	Taxpayer costs and taxpayer criminal justice system benefits, per program participant: Cost of program	Criminal justice costs avoided	Net gain (loss)	Number of years before cost is paid back	Percent reduction in felonies needed to break even	Crime victim costs avoided	Net gain (loss), taxpayer and crime victim costs avoided
Early Childhood Programs												
Perry Pre-School (Michigan)	H	Felony arrests by age 27	1.75	0.9	–48%	$13,938	$13,442	($496)	Doesn't Pay Back	–50%	$16,717	$16,221
Syracuse Family Development	M	Felony convictions by age 25	0.18	0.01	–93%	$18,037	$3,953	($14,084)	Doesn't Pay Back	Can't Break Even	$3,842	($10,241)
Middle Childhood Programs												
Seattle Social Development Project	M	Felony arrests by age 25	1.01	0.80	–21%	$2,991	$3,068	$78	14	–20%	$3,191	$3,268
Adolescent (Non-juvenile Offender) Programs												
Big Brothers/Big Sisters Mentoring	P	Felony convictions by age 25	0.27	0.21	–20%	$1,000	$1,978	$978	3	–10%	$2,505	$3,483
Quantum Opportunities	M	Felony arrests by age 25	0.35	0.10	–71%	$12,528	$4,216	($8,312)	Doesn't Pay Back	Can't Break Even	$4,247	($4,066)
Juvenile Offender Programs												
Adolescent Diversion Project (Michigan)	H	Felony reconvictions by age 25	0.45	0.29	–34%	$1,028	$6,055	$5,027	1	–6%	$7,299	$12,326

Functional Family Therapy	M	Felony reconvictions by age 25	0.68	0.49	–27%	$1,900	$7,168	$5,268	1	–7%	$8,640	$13,908
Intensive Supervision (Ohio)	M	Felony reconvictions by age 25	0.68	0.59	–13%	$5,959	$4,004	($1,955)	Doesn't Pay Back	–19%	$4,159	$2,204
Intensive Supervision (Orange Co., CA)	P	Felony reconvictions by age 25	0.68	0.53	–22%	$4,556	$6,164	$1,609	4	–16%	$6,961	$8,569
InterAgency Coordination	M	Felony reconvictions by age 25	0.27	0.19	–29%	$1,000	$2,900	$1,900	2	–10%	$3,672	$5,572
Juvenile Boot Camp Summary	H	Felony reconvictions by age 25	0.68	0.78	16%	($1,515)	($4,426)	($2,912)	Doesn't Pay Back	5%	($4,998)	($7,910)
Multi-Systemic Therapy	H	Felony reconvictions by age 26	0.68	0.38	–44%	$4,500	$12,381	$7,881	2	–16%	$13,982	$21,863
Paint Creek Youth Center (Ohio)	H	Felony reconvictions by age 27	0.68	0.56	–16%	$4,705	$5,056	$351	6	–15%	$5,250	$5,601
Teamchild (King County, WA)	P	Felony reconvictions by age 28	0.27	0.21	–20%	$625	$2,074	$1,449	2	–6%	$2,500	$3,950
Thurston County Fast Track Diversion	P	Felony reconvictions by age 29	0.27	0.19	–29%	$136	$2,900	$2,764	1	–1%	$3,672	$6,436
Treatment Foster Care (Oregon)	P	Felony reconvictions by age 30	0.68	0.43	–37%	$3,941	$9,757	$5,815	2	–15%	$11,760	$17,575

APPENDIX F

Sources of Information for Evaluated Programs

Throughout Europe and the United States, many programs have been implemented and evaluated using widely recognized scientific standards. The successes of these programs may not always be applicable to the Latin America and Caribbean region, but they give important indications of which programs are the most promising, as well as ideas for new programs. In addition, an increasing number of programs are being evaluated in LAC. The following list includes key resources by risk area.

General

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Crime and Violence

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Risky Health Behavior

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ECO-AUDIT

Environmental Benefits Statement

The World Bank is committed to preserving endangered forests and natural resources. The Office of the Publisher has chosen to print ***Youth at Risk in Latin America and the Caribbean: Understanding the Causes, Realizing the Potential*** on recycled paper with 100 percent postconsumer fiber in accordance with the recommended standards for paper usage set by the Green Press Initiative, a nonprofit program supporting publishers in using fiber that is not sourced from endangered forests. For more information, visit www.greenpressinitiative.org.

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Realizing the potential of young people in Latin America and the Caribbean is essential both to their well-being and to the region's long-term welfare. Young people are often seen as the source of problems that plague the area, namely rising levels of crime and violence, unemployment, and drug use. However, there is little understanding of the problems young people face, the reasons that some engage in risky behaviors, and how best to support the most vulnerable. *Youth at Risk in Latin America and the Caribbean: Understanding the Causes, Realizing the Potential* attempts to fill this knowledge gap by identifying at-risk youth and providing policy makers with evidence-based guidance that will make their countries' investments in young people more effective.

The authors find that more than half of the region's young people can be considered "at risk" of engaging in negative behaviors, which each year reduce regional economic growth by up to 2 percent. They also confirm that the causes of risky behavior in developed countries—weak relationships with schools and family, poor self esteem, household poverty, negative gender norms, and misguided laws—are also relevant in Latin America and the Caribbean. These problems call for a wider range of policy levers and actors than is usually considered in interventions related to young people. Based on this analysis, the authors describe 23 policies and programs that experts agree are the foundation of a successful youth development portfolio, ranging from early childhood development programs to parent training to cash transfers granted in exchange for positive behaviors. It also lays out strategies for implementing such a portfolio in a budget-constrained environment through, among other things, the collection of data on program effectiveness, the reallocation of resources away from ineffective programs, and the use of different elements of the portfolio by a more diverse set of actors. *Youth at Risk in Latin America and the Caribbean* will be of great interest to those working in the areas of social analysis and policy, social development and protection, and poverty reduction.

ISBN 978-0-8213-7520-4

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