Adolescents in Vietnam: Looking Beyond Reproductive Health

Barbara S. Mensch, Wesley H. Clark, and Dang Nguyen Anh

The research that has been conducted to date on Vietnamese adolescents has focused on unprotected and unsanctioned sexual activity and its health consequences, specifically abortion and sexually transmitted diseases, especially HIV. The question we pose in this article is whether this concern is warranted. Is the population community justified in limiting research on this population to early sexual activity and HIV risk? Even if the sexual behavior of young people can be considered problematic, are there perhaps other aspects of young peoples' lives to which more attention should be devoted? The literature on adolescent sexual behavior in Vietnam is reviewed and data on premarital sex and reproductive behavior are analyzed from a 1999 survey conducted in six provinces among nearly 1,500 adolescent boys and girls aged 15–22. Descriptive data on schooling and work are included in order to put the information on sexual activity in perspective. The data analysis reveals that, at least currently, the sexual behavior of unmarried adolescents in Vietnam is not what jeopardizes their health and well-being. (STUDIES IN FAMILY PLANNING 2003; 34[4]: 249–262)

Beginning in the 1970s, research on adolescents in the United States expanded greatly because of a concern with rising rates of premarital sex and childbearing. Recently, for similar reasons, numerous studies of adolescents have been initiated in Africa, Asia, and Latin America. The exporting of the US adolescent problem statement to the developing world has had consequences both for the nature of the data collected about young people and for the topics investigated. The medicalization of the research agenda has narrowed our lens of vision, limiting the scope of inquiry to adolescents' sexual and reproductive behavior (Mensch et al. 1998; Bruce and Mensch 1999). Research on adolescents in Vietnam has followed this pattern. For the most part, studies on Vietnamese adolescents have been concerned with unprotected and unsanctioned sexual activity or the health consequences of that activity—namely abortion and sexually transmitted diseases, especially HIV. This research focus also reflects the view of government officials in Vietnam, whose fre-

Barbara S. Mensch is Senior Associate, Policy Research Division, Population Council, New York. E-mail: bmensch@popcouncil.org. Wesley H. Clark is a consultant in international health. Dang Nguyen Anh is Director of the Population and Development Program, Vietnam Asian-Pacific Economic Center, and was Senior Researcher at the Institute of Sociology in Hanoi at the time the survey was conducted. quent references to "social evils"¹ in discussions of adolescents suggest that they are troubled about the behavior of the younger generation.

The Vietnam portrayed in the international press is a country where young people have no memory of the American war and are not interested in hearing their elders' tales of hardship and dedication (Schiffrin 1999). Rather, journalists suggest, they are concerned with finding jobs that pay well-possibly at one of the new Vietnamese-foreign joint ventures-and in using the money such jobs bring to live an international-style "high life." This sort of life was denied to their parents under prereform Communism, but it is said to attract young people increasingly as foreign products, advertising, movies, and television flood the country. A special issue of TIME² magazine on the shifting social landscape of Asia for which journalists were instructed to "hit the road, get out into the countryside, and talk to ordinary people" (Morrison 2000:4) devoted an article to "lifestyles of the young and impatient" in Vietnam. Tellingly, and despite the instruction noted above, the focus of the article was on Ho Chi Minh City, the largest city and single most Westernized locale in a country that remains, to this day, 80 percent rural. Discussing sexual behavior, the reporter asserted that "Sex before marriage-'eating rice before the bell,' as it was sometimes called—is now the norm" (McCarthy 2000:74).

The question posed here is whether the current concern about young people in Vietnam is warranted. Is premarital sex really becoming the norm, as media accounts would suggest, or is this finding an artifact of the journalistic tendency to work and gather information in cosmopolitan hubs? In turn, is the population community justified in focusing its attention on early sexual activity and HIV risk?

Fertility has declined considerably in Vietnam, but because of relatively high levels of childbearing in the recent past, Vietnam like other developing countries has a youthful age structure. Nearly one-third of Vietnam's population is between 10 and 24 years old (United Nations 2001). These 25 million young people represent the collective demographic and economic future of the country. Yet few studies exist that provide a broad picture of young Vietnamese as they navigate the period between childhood and adulthood. This article seeks to draw attention to the knowledge gap about adolescents in Vietnam.

Recent Research

A considerable number of demographic and health studies have been published on Vietnam in recent years. By and large, these have focused on population policy, in particular the one-or-two-child policy; declining fertility and mortality rates, which are lower than expected given the country's income per capita; the high incidence of induced abortion; and the greater reliance on the IUD than on other methods of family planning (Goodkind 1994 and 1995; Knodel et al. 1995; Van Phai et al. 1996; Bryant 1998; Merli 1998).

Few population-based studies of Vietnamese adolescents have been published in peer-reviewed journals. Moreover, studies that explore changes in fertility (see, for example, Haughton 1997) that have the potential to investigate the reproductive knowledge, preferences, and behavior of young people, have been constrained by the large surveys' (the 1988, 1997, and 2002 Vietnam Demographic and Health Surveys and the 1994 Vietnam Inter-censal Demographic survey) limitation to married women. Because of the relatively late age at marriage fewer than 10 percent of women aged 15–19 in 1992–93 were married (Desai 1998) - those adolescents who were included in the demographic surveys are clearly not representative of that age group as a whole. In contrast to the demographic surveys, the 1993 and 1997–98 Vietnam Living Standards Surveys (VLSS) obtained data on fertility and contraception from all women aged 15-49, but the way in which women were selected for the fertility module, with one woman in the designated age range chosen from each household, is thought to have resulted in a biased sample. (For a discussion of the bias, see Desai 1998.) More important, the VLSS does not include questions on the attitudes and behaviors of adolescents that are of greatest concern for this study.

A growing body of unpublished research as well as a number of published studies based on clinical or selective samples (such as single women presenting for abortion services in urban hospitals) focus on adolescent reproductive behavior in Vietnam. The major theme running through this research is that social and economic transformations in recent years have altered young peoples' experiences, expectations, and behavior fundamentally (see, for example, Nhan and Hang 1996; Bélanger and Hong 1998 and 1999; Hong and Mai 1998; and Long et al. 2000). The Confucian ideals of female chastity before marriage, patrilineal family structure and patrilocal residence,³ and close and intimate ties between parents and children have begun to weaken. The introduction of the Doi Moi (renovation) policy in 1986 and the resulting shift toward privatization and away from a planned socialist system has led to a more open economy, rising modern-sector employment, the increasing availability of cash, and improvements in mass communication, including a greater familiarity with Western culture. As a result, premarital sex and unplanned pregnancies are said to be increasing rapidly.

This picture of rising rates of premarital sexual activity, escalating numbers of unmarried women terminating unplanned pregnancies, and increasing prevalence of HIV infection among the young is also suggested by some published articles on contraceptive behavior and abortion based on larger and more representative data sets. In his 1994 article describing what is known about abortion in Vietnam, Goodkind suggests that the rise in pregnancies among the unmarried is a result of the changing social and economic climate. Contact with the West, asserts Goodkind (1994:350), "is probably contributing to a rise in sexual contacts, both premarital and otherwise" and, coupled with the government's unwillingness to provide reproductive health information to young people, has probably led to a rise in premarital pregnancy. Goodkind and Anh (1997) make a similar argument in their paper documenting an increase in condom use in Vietnam.4

Although claims about the changing nature of adolescent sexual behavior in Vietnam may seem plausible, particularly in the wake of increasing globalization, little empirical support is found for assertions about rising premarital sex and pregnancy. Instead these allegations rely on anecdotal evidence, such as the apparent increase in newspaper articles about the subject (see, for example, Hong 1998) and circumstantial evidence, namely the high abortion rate, which is attributed, in part, to the large number of young single women who, ostensibly, are undergoing the procedure (Goodkind 1994).

Yet data on the characteristics of women presenting for pregnancy terminations in Vietnam, where the abortion rate is reported to be greater than 100 per 1,000 women aged 15–44, the highest of any country where abortion is legal (Goodkind 1994; Henshaw et al. 1999), indicate that less than 1 or 2 percent are performed on women younger than 20. Goodkind (1994) notes that, based on clinical data, the majority of women obtaining abortions are married, have one or two children, and are between the ages of 25 and 34 (a pattern also found in other developing countries).⁵ Nonetheless, Goodkind suggests, and others concur (Bélanger and Hong 1998 and 1999), that in Vietnam, abortion is underreported among adolescents because of the longstanding taboo against premarital sex. He argues that young, unmarried women who terminate pregnancies misreport their age and marital status to the abortion service provider.

To document trends in adolescent behavior in Vietnam, researchers have also tried to detect whether attitudes about sexual activity among the unmarried have changed in recent years. A consensus is found in the literature that although the older generation strongly condemns premarital sexual relations, young people are much more inclined to approve of sex before marriage or at least to regard it without "disdain" (Hong 1998:40). Yet, assuming that young people respond candidly to questions about premarital sex (even if they are unwilling to respond accurately to questions about their own sexual behavior), evidence of a widespread sexual revolution taking place in Vietnam is hard to find based on responses to such attitudinal questions. Two recent surveys, one of a sample of approximately 1,600 university students aged 17-24 in Hanoi and Ho Chi Minh City and the other of a sample of more than 1,100 young people aged 15-24 in Haiphong City, posed questions about respondents' attitudes concerning premarital sex. The findings of the two surveys were similar: In the Haiphong survey, 93 percent of young women and 70 percent of young men disapproved of sexual activity before marriage; the comparable proportions from the other survey were 98 percent and 74 percent (Nhan and Hang 1996; Anh et al. 1999). Of course, the possibility of courtesy bias, which distorts responses in face-to-face interviews, may be especially pronounced in Vietnam given the Confucian tradition of encouraging respect for those in positions of authority, even though such a tradition may represent more an ideal than current reality. Undoubtedly, interviewers are viewed by youthful respondents as authority figures. Therefore, survey research on sensitive topics in Vietnam may be particularly problematic.

The "Adolescents and Social Change in Vietnam" Survey

As noted above, Vietnam has experienced profound changes as a result of the introduction of the Doi Moi policy in 1986. Perhaps as a consequence of these economic changes, hints may be found in recent World Bank data of slight declines in school enrollment, especially among girls (Glewwe and Jacoby 1998). An expanding number of studies, cited earlier, point to increases in premarital and unsanctioned sexual activity and also to substance abuse, with all their attendant health, social, and demographic consequences. Most young people today have seen their families' relatively poor economic situation improve over the last decade or so and are aware of the potential for even greater future economic opportunities for themselves. The collapse of the "Asian Miracle" in the nineties, however, may have led to some confusion and uncertainty about the future (UNDP 1998).

The goal of the Adolescents and Social Change in Vietnam (VASC) survey was to investigate the lives of adolescents in a range of economic, cultural, and environmental conditions at a point in Vietnamese history when aspirations are rising, the health and other risks young people are facing are considerable, and the consequences of missing out on available opportunities are potentially severe.

The VASC survey was undertaken by the Institute of Sociology in Hanoi in collaboration with the Population Council. Interviews were conducted in the fall of 1999 with 2,126 young people aged 13–22. Because resources to conduct a nationally representative study were not available, six of Vietnam's 61 provinces were purposively selected covering a range of urban and rural ecological and cultural zones in the south, north, and center of the country. Their locations are shown in Figure 1. In addition to the interviews with adolescents, interviews were conducted with parents, and a community survey was completed in the 24 sample sites.

The six provinces are: Lai Chau in the far northwest —a rural province in the northern highlands, inaccessible by land at many times of the year, with a large population of minority ethnic groups; Quang Ninh in the far northeast—a largely rural northern coastal province at some distance from Hanoi, where coal mining is a major activity; Ha Tay in the Red River floodplain adjacent to Hanoi—a rural northern agricultural province that is, nevertheless, easily accessible from Hanoi, the largest city in the north; Quang Nam-Da Nang on the central coast a province comprising both urban and rural districts where local and foreign joint-venture light industry has recently been established; Ho Chi Minh City (Saigon) in the south—Vietnam's largest and most economically ac-

Figure 1 Provinces selected for the Adolescents and Social Change in Vietnam (VASC) Survey, 1999



tive city, site of much of the country's economic expansion and diversification since the commencement of reforms in the mid 1980s; and Kien Giang in the far south —a coastal southern agricultural province.

In each province, two (or, in the case of Ho Chi Minh City, three)⁶ districts were randomly selected for fieldwork. In each district, two wards (urban) or communes (rural), the country's smallest administrative units, were then randomly selected.⁷ The distribution of wards/communes in each province was based on the urban-rural distribution of the province's population, with the result that 19 communes and five wards were designated for inclusion. The distribution of communes and wards in the sample reflects the urban-rural breakdown in Vietnam as a whole: Currently, 80 percent of Vietnam's population lives in rural areas. Once the distribution of communes and wards was determined, selection of a particular ward or commune was random. Household listings for each ward and commune were obtained from local authorities. Because the 1999 Population and Housing Census had been concluded recently, listings were likely to be reasonably complete. One hundred households with an adolescent aged 13-22 were randomly selected for the survey in each ward or commune. In households having multiple adolescents, one was randomly selected for the interview. Of the 2,400 adolescents selected, 2,126 (89 percent) were interviewed. Although this response rate is high for a survey of young adults, those who were not interviewed differed from those who were; specifically, the former tended to be older and disproportionately male. Table 1 indicates the age distribution of the adolescent sample by sex.

The survey included three instruments: a roster administered to an adult residing in each household (preferably a parent), an adolescent questionnaire, and a community questionnaire administered to a local authority in each ward or commune. The analysis here relies primarily on the adolescent questionnaire, which included basic demographic questions as well as questions about family background; educational history; daily time use; work history; experiences with regard to puberty, menstruation, marriage, sex, pregnancy, abortion, and childbirth; reproductive health and family planning knowledge and experience; drug and alcohol use; recreational activities; and mobility and migration. Information was also obtained from the household roster/questionnaire that collected data on the name, age, sex, education, health, and work status of all usual household residents as well as anyone aged 13-22 who had lived in the household but was currently residing somewhere else. The instrument also included questions about household assets, amenities, main sources of income, and the ethnicity and religion of the family.

Results

The sample is drawn from widely varying regions of Vietnam, deliberately chosen because they represent the range of environments experienced by Vietnamese young people today. Because the sample is not nationally representative, it would be misleading to combine the data across provinces and present the results as if they characterize Vietnamese adolescents as a whole. In analyses for which the sample is too small to disaggregate the data by province, the results can be generalized only to the six provinces included in the survey and not to all of Vietnam.

Premarital Sex

In the VASC survey, respondents aged 15 and older were asked if they had ever had sexual relations and, if so, at what age they first did so. The present analysis is

Table 1Percentage distribution of the VASC sample, by ageand sex, Vietnam, 1999

Age	Males	Females	
13–14	22	21	
15–16	28	25	
17–18	21	22	
19–20	18	19	
21–22	11	12	
(N)	(985)	(1,141)	

restricted, therefore, to the responses of the 1,497 adolescents aged 15–22. For those who had married, the information on age at first intercourse was compared with the responses on marriage to determine if sex had occurred prior to marriage. Among the 764 males aged 15– 22 for whom information on sexual behavior was available, only 10 percent reported having had premarital sex; among the 733 females in the same age category, only 5 percent reported having had premarital sex. As Table 2 shows, the reported premarital sex rates for males vary considerably by province from none in Quang Nam-Da Nang to 19 percent in Ho Chi Minh City. For females, the proportion reporting premarital sex ranges between 2 and 9 percent.

Table 3 compares the percentage of never-married Vietnamese 15-19-year-olds who have ever had sex with data from two other Southeast Asian countries, the Philippines and Thailand, which have data for both boys and girls.8 Vietnamese boys appear to be less likely to engage in sex prior to marriage than boys in the other two countries. Although the aggregate data for Vietnam may be misleading to some degree in that the sample is not nationally representative, the level of premarital sex observed in five of six provinces is so low that were a national survey to be conducted, reported rates clearly would be lower among boys in Vietnam than elsewhere. Only in Ho Chi Minh City, where 11 percent of unmarried boys aged 15-19 report having had sex, does the rate approach those of the other countries, but, as noted above, Ho Chi Minh City is not representative of Vietnam. In contrast with the rates for boys, the reported rates for adolescent girls are low in the other two Southeast Asian countries as well. When the comparison is broadened to include countries in Latin America and Africa, Vietnam and, by extension, the other two countries in Table 3, stand out. In all 32 African and Latin American countries where a Demographic and Health Survey has been conducted, rates of premarital sex among adolescent girls are higher than those found in Vietnam, and in 31 of the 32, the proportion of girls who report having had premarital sex is at least two times higher than that of Vietnam.9

Table 2Percentage of 15–22-year-olds who reported having
had premarital sex, by province, Vietnam, 1999

Province	Males	Females
Ha Tay	3	2
Ho Chi Minh City	19	3
Kien Giang	15	9
Lai Chau	13	8
Quang Nam-Da Nang	0	3
Quang Ninh	13	9
Total	10	5
(N)	(764)	(733)

 Table 3
 Percentage of never-married 15–19-year-olds who have ever had sex, by country

Country	Males	Females
Vietnam	6 (provincial range 0–11)	2 (provincial range 0–3)
Philippines	12	1
Thailand	27	3

Source: For Philippines and Thailand, see Singh et al. (2000).

Given that sexual activity is often initiated between the ages of 15 and 22, a life table is a more appropriate tool for analyzing the risk of premarital sex in an adolescent sample. Figure 2 indicates the probability of initiating premarital sex separately by sex for the sample as a whole and is based on a life table. Clearly, little premarital sex occurs before the age of 18; just over 6 percent of boys and fewer than 4 percent of girls are predicted to initiate sex before their eighteenth birthday. Again, this finding contrasts sharply with the experience of adolescents in sub-Saharan Africa and Latin America (AGI 1998). By their twenty-second birthday, approximately 29 percent of unmarried young men and 16 percent of unmarried young women in Vietnam are predicted to have had sexual intercourse.

In comparing the estimates of premarital sex among never-married women with those among the married and unmarried combined, reporting of premarital sex among the married clearly is higher. Figure 3 shows the probability of having had premarital sex by marital status among young women. (Males are excluded because too few young men in the sample are married for this analysis to be conducted for them.) About half of married women in the sample—approximately 18 percent of those aged 15–22 are married—are estimated to have premarital sex before their twenty-first birthday as con-

Figure 2 Probability that 15–22-year-olds will have premarital sex, Vietnam, 1999

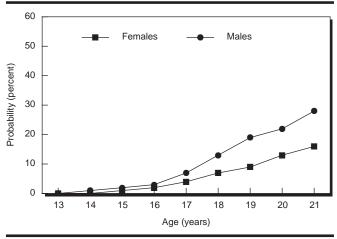
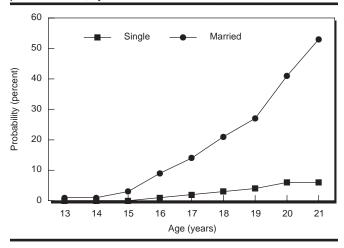


Figure 3 Probability that young women aged 15–22 will have premarital sex, by current marital status, Vietnam, 1999



trasted with 6 percent of the unmarried. The question remains whether the higher level of premarital sex reported by married women reflects their greater willingness to disclose information about their sexual behavior in a face-to-face interview; that is, once married, do women feel freer to talk about premarital sex? Evidence from the National Longitudinal Survey conducted in the United States suggests that adolescents are more likely to conceal information about their sexual activity initiated in the period around the time of the interview (Wu et al. 2001). An alternative hypothesis explaining the differences in reporting for the two categories of women is that, having decided to marry, women may feel comfortable about having sex with their fiancés because societal proscriptions against premarital sex are likely loosened when sexual activity occurs with a future spouse. Determining which scenario characterizes the situation in Vietnam is important because if the higher rate of premarital sex reported among married women is attributable to a greater inclination of these women to talk openly about their behavior, premarital sex among young people is likely to be much more common than these data demonstrate.

To address the issue of the increased level of premarital sex reported by married women, answers to the question about the respondent's first sexual partner were analyzed. Among married women who reported that they had had premarital sex, 87 percent had sex with the men who later became their husbands. So although married women are more likely to have engaged in premarital sex, this activity occurred with their future husbands and, therefore, was unlikely to be considered a "social evil" in the eyes of most Vietnamese.

A comparison of HIV prevalence across countries suggests that the data collected in this survey concerning premarital sex are not totally off the mark. According to UNAIDS, Vietnam has much lower rates of HIV prevalence among 15–24-year-olds than does Cambodia, Myanmar, or Thailand. Interestingly, in contrast with these countries, the prevalence of HIV in Vietnam is higher among males than among females in this age group (see Table 4).¹⁰ When rates are higher among young men than young women, transmission is likely occurring through needle sharing among drug users; drug users, in turn, infect others through sexual activity. Indeed, according to UNAIDS and WHO (2000), in 1998–99, the majority (64 percent) of new HIV infections in Vietnam were estimated to occur among users of injectable drugs.

Sexual Activity among Peers

Before we can conclude that premarital sex among adolescents in Vietnam is much less common than is widely thought, we must be confident that adolescents are not underreporting sexual activity, particularly in comparison with their peers in other countries. Indeed, the finding that not one boy in Quang Nam-Da Nang reported having had premarital sex suggests that underreporting is a potential problem.

Although methodological research is needed to assess the degree of underreporting of premarital sex among young people, we sought to determine the extent of it with our own data. In addition to being questioned about their own sexual behavior, respondents were asked whether their best friend had ever had sex, because young people are likely to be more candid in providing information about their friends' behavior than about their own. Of those whose best friend was not married, 14 percent of boys (n = 646) and 9 percent of girls (n = 717) indicated that their friend had had sex. These proportions are indeed higher than those that respondents reported for their own behavior. Assuming that their friends' behaviors mirror their own, this finding constitutes indirect evidence that some underreporting of sexual activity exists among boys and girls. No data are available concerning respondents' friends' sexual behavior in other countries; we assume that for other countries, as for Vietnam, rates reported for friends would be higher than rates reported by respondents for themselves. Unless the

Table 4UNAIDS high estimates of the percentage of youngpeople aged 15–24 infected with HIV, 1999

Country	Males	Females
Cambodia	3.77	4.70
Laos	0.05	0.05
Myanmar	1.67	2.30
Thailand	1.89	3.11
Vietnam	0.38	0.10

Source: UNAIDS and WHO (2000).

underreporting is much greater for Vietnam than for other countries, however, the data suggest that premarital sex among adolescent boys is lower in Vietnam compared with other developing countries in Southeast Asia, Latin America, and sub-Saharan Africa.

Dating Behavior

Because underreporting of premarital sexual activity was anticipated, we also asked respondents about their dating behavior because, more often than not, dating precedes sexual activity. Not only do responses about dating give a sense of the numbers of adolescents at risk of having premarital sex, they also indicate how young people in Vietnam interact with one another. Specifically, males were asked whether they had had a girlfriend and females were asked whether they had ever had a boyfriend. Table 5, in which findings are limited to unmarried respondents aged 15-22, indicates that dating, defined as having a girl or boyfriend, is much more common than having premarital sex, particularly among females, who in some provinces report higher rates for dating than do males. As expected, the likelihood of having had a girlfriend or boyfriend increases markedly with age (not shown). Among young men, 14 percent of those aged 15-19 and 39 percent of those aged 20-22 report having had a girlfriend; the analogous numbers for young women are 19 percent and 40 percent—proportions that by Western standards are not particularly high.

We also sought to determine whether respondents socialized with members of the opposite sex by asking them to report on how they spent their time the day before the interview. We divided the day into seven segments, from midnight to 5 A.M., 6 A.M.–9 A.M., 10 A.M.– noon, 1 P.M.–3 P.M., 4 P.M.–6 P.M., 7 P.M.–9 P.M., and 10 P.M.– midnight. For each segment, respondents were asked to list the activities that occupied their time, beginning with the activity that took up the most time during that period. If respondents were currently attending school and were interviewed the day after a weekend, they were

Table 5Percentage of unmarried respondents aged 15–22reporting that they had ever had a girlfriend or boyfriend, byprovince, according to sex, Vietnam, 1999

Province	Males	Females
На Тау	19	26
Ho Chi Minh City	36	32
Kien Giang	26	23
Lai Chau	13	29
Quang Nam-Da Nang	7	11
Quang Ninh	18	19
Total	20	23
(N)	(730)	(733)

asked to list their activities during the last school day.¹¹ Fourteen activity categories were specified, including sleeping, personal care, transit to and from school or work, at school or work, domestic duties, helping on a family farm or business, and recreation. Recreation was further divided into whether it took place at home or outside, and whether it involved the respondent alone or included family or the same or opposite-sex friends. The proportion who reported that they had spent some time the day before the interview socializing with a member of the opposite sex is shown in Table 6, in which the data are again limited to responses from unmarried adolescents aged 15-22.12 Overall, only 9 percent of males and 7 percent of females spent time with the opposite sex. Moreover, of those currently attending school, only 2 percent of both boys and girls spent some time with a member of the opposite sex (not shown). (The comparable numbers for those not in school were 16 percent for males and 11 percent for females.) Interestingly, although time spent with someone of the opposite sex increases with age for males (6 percent for those aged 15-19 and 20 percent for those aged 20–22), it does not for females (7 percent both for those aged 15–19 and for those aged 20–22), a finding that may reflect the increase in girls' domestic responsibilities as they grow older (not shown) (Population Council and Institute of Sociology 2000).

Pregnancy, Abortion and Childbearing

In light of the low levels of premarital sex that respondents reported in the VASC survey, it follows that reported rates of premarital pregnancy and childbearing will also be low. Indeed, of the 733 unmarried women aged 15–22 in the sample, only four reported a pregnancy; two of the four reported an abortion or menstrual regulation, and only one reported a birth.

On the other hand, childbearing is not uncommon among the married women in the sample. Of the 164 women who are married, 122 (74 percent) reported having had a child, and 18 (11 percent) reported having had an abor-

Table 6	Percentage of unmarried respondents aged 15–22
who enga	aged in any recreational or social activity with
someone	of the opposite sex, by province, according to sex,
Vietnam,	1999

Province	Males	Females	
На Тау	3	3	
Ho Chi Minh City	4	2	
Kien Giang	14	7	
Lai Chau	4	10	
Quang Nam-Da Nang	11	3	
Quang Ninh	24	21	
Total	9	7	
<u>(N)</u>	(731)	(733)	

tion or having used menstrual regulation. Because early marriage is not common in Vietnam, however, overall rates of teenage childbearing are low. To monitor early childbearing, demographers often compute the proportion of women who have had a child by age 18 or 20 among those older than 20 in different age cohorts. Unfortunately, because the age range of participants in the VASC survey extends only to 22, the denominator for this calculation is small, limited to women aged 20–22. Nonetheless, because a comparable measure of adolescent childbearing is available for many countries, it is worthwhile to include it here.

As Table 7 shows, 20 percent of women aged 20–22 gave birth before they were 20, virtually all, as indicated above, within marriage. Among 46 developing countries for which published data are readily available, only four have proportions lower than this for women aged 20– 24 (AGI 1998). The United States, which is unusual among wealthy countries in the large proportion of women who give birth as teenagers, has a rate of 22 percent, with 62 percent of these births being to unmarried women. With regard to childbearing before the age of 18, Vietnam, with a rate of 4 percent, is even more unusual. Only China, among developing countries, has a lower proportion; the rate for the US is 9 percent. As noted above, however, because the sample is not nationally representative, the aggregate data for Vietnam may be misleading. Although the provincial samples are small, we have presented them to demonstrate the enormous variability in the country. Lai Chau, which clearly represents one extreme, has a much higher rate of childbearing before age 20 than do the other provinces; this rate is comparable, however, to that of most Latin American countries and lower than the rates of virtually all African countries. Although the rate of childbearing before age 20 is higher in Lai Chau than in many Asian countries, the rate for girls younger than 18 is comparable to the rates for that age group observed in most Asian countries.

From the data presented here, adolescent reproductive behavior does not appear to be particularly problematic in Vietnam, at least not at this time. The vast major-

Table 7Percentage of women aged 20–22 who gave birthbefore age 18 and before age 20, by province, Vietnam, 1999

before age to and before age 20, by province, vietnam, 1999				
Province	Gave birth before age 18	Gave birth before age 20		
На Тау	0	19		
Ho Chi Minh City	3	11		
Kien Giang	6	21		
Lai Chau	9	44		
Quang Nam-Da Nang	0	5		
Quang Ninh	5	22		
Total	4	20		
(N)	(242)	(242)		

ity of adolescents indicate that they are not engaging in premarital sex. In fact, most young women who are having sex prior to marriage report doing so with their future spouses. Nor are a majority of young people spending a lot of time socializing with members of the opposite sex or dating, as are their counterparts in the West. Finally, premarital childbearing is rare, and the rate of teenage childbearing within marriage is low by comparison with that of other developing countries.

HIV infection, a health problem that, obviously, must be monitored, remains at low levels among 15-24-yearolds, particularly among young women. Moreover, although knowledge does not necessarily translate into use, particularly in Vietnam where premarital sex is socially stigmatized, according to the VASC survey, the majority of young people in Vietnam would appear to be familiar with condoms. In the interview, we assessed both spontaneous and probed¹³ knowledge of contraceptive methods. Among 15–22-year-olds, spontaneous knowledge of condoms is 69 percent (ranging from 43 percent in Lai Chau to 88 percent in Ho Chi Minh City), and probed plus spontaneous knowledge is 86 percent (ranging from 61 percent in Lai Chau to 96 percent in Ha Tay) (not shown). A comparison of condom awareness as reported in the VASC survey with data from other countries reveals that Vietnamese adolescents are as knowledgeable as their peers in Asia and Latin America and more knowledgeable than their peers in sub-Saharan Africa (Population Council and Institute of Sociology 2000).

If rates of premarital sex, childbearing, and HIV infection are not currently high among young Vietnamese, why is the population community so concerned? The question is whether the nightclubs and karaoke bars that have opened in recent years in cities, especially in Ho Chi Minh City, signal a transformation in the behavior of young people throughout the country or merely represent a lifestyle change among the urban elite.

Problems Facing Vietnamese Adolescents

If the sexual and reproductive behavior of adolescents is not, or not yet, a major cause for concern, what are the critical problems facing young people as they make the transition to adulthood in Vietnam? In the VASC survey, we asked respondents what their biggest concern or worry was for themselves in the five years ahead. This analysis is not presented according to province because the tables become unwieldy. Moreover, considerably more variability is found by age than by residence. Although education is a worry for younger adolescents, generally, the main issue that troubles young people is employment and/or poverty (see Table 8a). Even young

	Employme	ent/poverty	Edu	cation	н	ealth		marriage/ bearing
Age	Males	Females	Males	Females	Males	Females	Males	Females
15–17	58	59	53	43	23	25	15	24
18–19	80	70	30	21	19	20	26	39
20–22	81	75	14	11	26	32	34	39
Total	69	66	38	29	23	25	23	32

Table 8aPercentage of 15–22-year-olds who cite specific concerns for the upcoming five years, by age, according to sex,Vietnam, 1999

Note: Multiple responses are possible.

women are more concerned about their economic circumstances than they are about traditional female domains such as family, marriage, and childbearing. As for young people's worries about society at large, the category of "social evils" heads the list of major concerns, which is not surprising in light of the publicity the government has given to this issue. Unemployment is a close second, however (see Table 8b).¹⁴

Substance Use

In enumerating problems facing adolescents in Vietnam, the first considered here is substance use, which falls into the government's category of "social evils." In the VASC survey, respondents were asked about heroin and cocaine use; only 1 percent of boys and less than 1 percent of girls report that they have ever experimented with these drugs. Even though few adolescents in the sample admit to using these substances, a problem with narcotics may, nevertheless, exist in the six provinces sampled. Most likely, respondents were unwilling to discuss drug use with the interviewers. Indeed, when respondents were asked if they had a friend who used heroin or cocaine, 10 percent of boys and 9 percent of girls said that they did, responses that give indirect evidence both of serious underreporting in this sample and of a potential problem with substance abuse among young people in Vietnam. For a population-based survey, these numbers are high, supporting the popular perception that illegal substances are widely available and abused, at least among certain segments of the population (McCarthy 2000).

Table 8b	Percentage of 15–22-year-olds who cite specific
concerns a	about present-day society, by sex, Vietnam, 1999

Concern	Males	Females
"Social evils"	76	75
Unemployment	64	66
Environment	59	59
Family	35	38
Economic stratification	30	32
Corruption	29	26

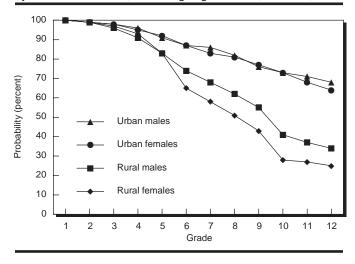
Note: Multiple responses are possible.

Schooling

Because a large fraction of the younger respondents are concerned or worried about their education, we investigated rates and reasons for leaving school among those aged 15-22 in the VASC sample. In general, educational attainment, as measured by enrollment in primary school, is high in Vietnam, especially in light of the poverty suffered by much of the population. According to the VASC data, among the study provinces, Lai Chau is the only one where fewer than 95 percent of adolescents have ever been to school; for girls, the rate in Lai Chau is 75 percent, for boys 93 percent. An analysis of trends in schooling in Vietnam from 1980 through the early 1990s indicated that enrollment appeared to decline in the 1980s, probably because of the increased opportunity cost of schooling that accompanied the transition to a market economy and the decollectivization of communes (Glewwe and Jacoby 1998). The VASC data indicate that some improvement in school enrollment occurred during the latter part of the 1990s; at that time, younger adolescents (aged 13-17) were predicted to progress further in school than were older adolescents (aged 18-22) (not shown), a change observed in the 1997–98 VLSS as well (Glewwe and Jacoby 2002).

Although the vast majority of adolescents have been to school, levels of attainment vary considerably among different population groups. Indeed, according to Figure 4 (which is based on life-table estimates), young people in rural areas are much more likely than their urban peers to leave school early. The hazard rate of leaving school after completing grade 5 (the end of primary school) is more than four times higher among girls living in rural areas than among those in urban areas. Likewise, the hazard rate of leaving school after completing grade 9 (the end of lower secondary school) is nearly seven times higher among boys living in rural areas than among their counterparts in urban areas. The finding that the urban-rural gap is much greater than the gap between boys and girls is consistent with Knodel and Jones' (1996) observation that socioeconomic differentials in educational attainment are much larger in Vietnam than gender differentials and with Glewwe and Jacoby's (1998)

Figure 4 Probability of adolescents' being enrolled in school, by sex and residence, according to grade level, Vietnam, 1999



finding regarding the rising opportunity cost of schooling in rural areas. When respondents in the VASC survey who were no longer enrolled in school were asked the reasons why they had left school, the most common reason given among boys and girls in both rural and urban areas was that their families could not afford the cost of keeping them in school (see Table 9). Vietnam introduced school fees in 1989, and although tuition is not the major cost of schooling (Glewwe and Jacoby 1998), access to education and higher-quality schooling varies by income because of other school-related expenditures (Behrman and Knowles 1999). Indeed, using data on consumption expenditures to measure wealth, a recent analysis of the growth in school enrollment in Vietnam between 1993 and 1998 finds a substantial effect of household financial status on the demand for education (Glewwe and Jacoby 2002). The finding that both the quantity and quality of schooling is dependent on income is clearly an issue for a Vietnamese government dedicated, at least nominally, to social and economic equity.

Table 9Percentage of males and females aged 15–22 wholeft school, by main reason for leaving, according to residence,Vietnam, 1999

	Mal	les	Females	
Reason	Urban	Rural	Urban	Rural
Family could no longer pay school fees	31	35	39	34
Work at home/child-care responsibilities/job	2	10	4	15
Poor performance at school	19	19	9	18
Access to/quality of school	22	13	7	10
Completed level	19	10	30	8
Miscellaneous	7	13	11	16
(N)	(58)	(345)	(94)	(489)

Current Work Status and Underemployment

Employment and poverty are the primary concerns for the future mentioned by the survey respondents. The data demonstrate that strong justification exists for their anxiety. Table 10 provides information on employment status in the week before the interview among all boys who are not in school and among unmarried girls¹⁵ who are not in school.¹⁶ The definition of work used here includes work for payment in cash or in kind and work in a family business or farm.¹⁷ Although rates of "nonwork," which we define more broadly than most conventional measures of unemployment in that "discouraged" workers are included here, vary considerably, they are high for boys in all provinces and for girls everywhere but in Ha Tay. The provincial rates mask the point that urban residence is what really makes the difference rather than residence in a particular region. As the marginals in Table 11 reveal, for both boys and girls, rates of nonwork are twice as high in urban as in rural areas, although even in rural areas, approximately one-fifth of out-of-school adolescents are not working. Perhaps because they can afford to be out of work while searching for a job that suits their skills, those who are most likely to be unemployed are the better-educated urban dwellers. This situation is not uncommon in the developing world (Montgomery et al. 2003). More than half of the respondents of both sexes living in urban areas and having at least some secondary education were not working in the week prior to the survey.

As the data reveal, a substantial fraction of those who are out of school but not working (39 percent of males and 45 percent of unmarried females) are not currently looking for paid employment (not shown). Indeed, a substantial proportion of young people do not appear to be actively engaged in any organized activity. Table 12 shows the proportions of respondents who are neither currently working nor in school according to residence and age. Both in rural and urban areas, the rates of those "doing nothing" increase with age so that by ages 20–22, about

Table 10	Percentage of out-of-school respondents aged					
15–22 who	are not working, by province, according to sex,					
Vietnam, 1	999					

Province	Males	Females
На Тау	16	4
Ho Chi Minh City	40	36
Kien Giang	24	22
Lai Chau	21	18
Quang Nam-Da Nang	39	43
Quang Ninh	19	22
Total	24	23
(N)	(459)	(530)

 Table 11
 Percentage of out-of-school respondents aged 15–22 who are not working, by residence, according to sex and educational attainment, Vietnam, 1999

		Males			Unmarried females			
Residence	< Primary	Completed primary	Some secondary	Total	< Primary	Completed primary	Some secondary	Total
Urban	<u> </u>	46	54	47	a	24	52	42
Rural	19	18	24	20	9	21	22	19
Total	20	22	29	24	13	21	30	23

^a Fewer than 20 respondents in this category.

 Table 12
 Percentage of all males and unmarried females aged 15–22 who reported "doing nothing," by residence, according to age, Vietnam, 1999

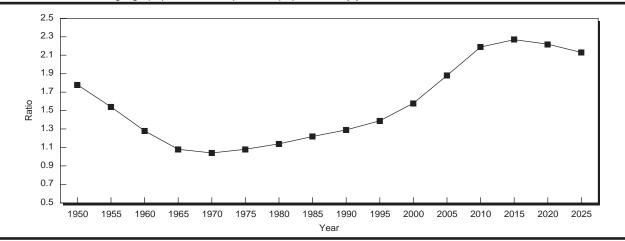
Residence	Aged 15–17		Aged 18–19		Aged 20–22		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
Urban	15	14	20	15	19	33	18	19
Rural	7	10	17	18	19	18	12	13
Total	8	11	17	17	19	23	13	15

Note: Doing nothing = Not in school and not working (either at paid or unpaid jobs) in the week prior to the survey.

one-fifth of boys and nearly one-fourth of unmarried girls are neither working nor in school. Interestingly, of those categorized as doing nothing, nearly three-fourths of males and nearly two-thirds of females have worked in the past 12 months (not shown). This finding suggests that unemployment and stability of employment are both problems facing young people in Vietnam.¹⁸

The employment situation facing young people in Vietnam is not at all unusual—after all, unemployment rates among 15–24-year-olds are disproportionately high the world over. As in other countries, however, the absence of sufficient work opportunities for large cohorts of out-of-school adolescents in Vietnam could prove problematic both for them and for the society at large. If Vietnam follows in the footsteps of the East Asian Tigers and capitalizes on the increase in the adult population of working age relative to the dependent population, economic growth may be greatly enhanced (Dollar and Litvack 1998; Williamson 2001). This so-called "demographic gift," which is a consequence of fertility decline, is one reason economists now believe that other East Asian countries had such high levels of economic growth in the past 30 years (Birdsall and Sinding 2001; Bloom and Canning 2001). In Vietnam, as Figure 5 indicates, the ratio of the working-age population (those aged 15–65) relative to the nonworking population (those younger than 15 and older than 65) will peak in 2015 at close to 2.3, which is comparable to the peak observed in other East Asian countries but higher than in other regions (Bloom and Canning 2001). Whether Vietnam can take advantage of this demographic bonus will depend on whether the economy can absorb this large cohort of young people.

Figure 5 Ratio of working-age population to dependent population, by year, Vietnam



Source: United Nations (2001).

Conclusion

A recent International Planned Parenthood Federation news release reporting on an advocacy campaign in Vietnam to increase awareness of the reproductive health needs of young people noted that the HIV prevalence rate among 15–24-year-olds "is relatively high with 0.27 percent of young men and 0.09 percent of young girls affected."¹⁹ To further emphasize that the reproductive behavior of young people is a cause for concern, it stated that the adolescent fertility rate among 15–19-year-olds in Vietnam is 20 per 1,000 compared to four per 1,000 in the Netherlands, and that the Vietnamese abortion rate is one of the highest in the region (International Planned Parenthood Federation 2002).

The numbers cited in the news release correspond to those published by UN agencies. Their interpretation is problematic, however. HIV prevalence is not high among young people in Vietnam compared with rates among the young in many other countries. Moreover, the adolescent fertility rate, although not as low as that of Japan or certain Western European countries, is lower than that of virtually all developing countries for which such data exist, with the exception of China, and lower than that of most Eastern European countries as well as Canada, England, Iceland, New Zealand, and the United States.

Neither the population community nor adolescents are usefully served by well-intentioned policymakers and researchers who overstate the extent of reproductive health problems facing adolescents. As the data on work status demonstrate, the more critical issue for young people in Vietnam is the absence of steady employment, particularly for those in urban areas. As noted above, in the VASC sample, more than half of all out-ofschool males and unmarried females resident in urban areas with some secondary education are not currently working.

Effectively integrating large cohorts of out-of-school adolescents into the economy is a difficult task for any country, but particularly for a country such as Vietnam, which is still at an early stage of economic development. Yet the absence of sufficient employment opportunities for young people not only has implications for their economic well-being, but also may have consequences for their health. Although the prevalence of HIV among those aged 15-24 is still low, this situation could change. In light of the ready availability of drugs in Vietnam and the difficulty of providing adequate job opportunities, a scenario can easily be envisioned in which large numbers of young people become substance abusers. In a country where injectable-drug use is the major route of HIV transmission, this possibility is particularly worrisome. Moreover, poverty and a lack of economic opportunities often lead families, sometimes unwittingly, to send their daughters to work in the commercial sex industry (Willis and Levy 2002).

The data presented here suggest that at least currently, the sexual behavior of unmarried adolescents in Vietnam is not what jeopardizes their health and well-being, although increasing contact with the West may alter the situation in the future. Addressing fundamental economic problems may help to keep HIV confined to a relatively small portion of the adolescent population. Not addressing these problems could lead to a breach in whatever reproductive health defenses have been put in place.

Notes

- 1 In Vietnam, the term "social evils" is used to refer to drug use, commercial sex work, and HIV/AIDS, as well as to premarital sex among adolescents.
- 2 The special double issue, entitled "An Asian Journey," was published by *TIME*, *Asia*.
- 3 Hirschman (1994) notes that although the Confucian ideal of patrilocal residence is not the norm in Vietnam, ties between non-resident family members are extremely close. Daily contact between parents and children remains common.
- 4 Using data from the intercensal surveys, they speculate that the so-called rise in condom use (which, incidentally, is not large, increasing from 1 percent in 1988 to 4 percent in 1994) is attributable in part to higher levels of premarital sex (Goodkind and Anh 1997).
- 5 In developed countries, adolescents are disproportionately represented among abortion clients. Typically, in developing countries, adolescents are overrepresented among women presenting with abortion complications (Mensch et al. 1998).
- 6 Three districts were required in order to sample the requisite distribution of wards/communes in Ho Chi Minh City.
- 7 Nationwide, there are approximately 615 districts and 10,477 communes/wards with approximately 1,000 households in each ward/ commune. The number of districts per province ranges from eight to 20.
- 8 Because of the way the published data are presented, this table compares reports of sex among the unmarried rather than premarital sex among the married and unmarried combined as in Table 2. Also, the data are limited to 15–19-year-olds.
- 9 See AGI 1998: 51, Appendix Table 3. The proportion of women aged 20–24 who reported having had premarital sex prior to age 20 ranges from 5 to 81 percent in 21 sub-Saharan African countries, with only one country showing a proportion lower than 10 percent. In Latin America, the range for 11 countries is from 10 to 40 percent. Because the oldest women in our sample are 22, we computed the percentage of Vietnamese women aged 20–22 who had had premarital sex by age 20, which yielded 3.6 percent.
- 10 The high estimates for the same age group in the United States are 0.75 for males and 0.30 for females, two to three times the prevalence found in Vietnam.
- 11 If the last day was unusual in that it was a holiday or other special day, for example, the day of a wedding or a funeral, the respondent was asked about the "last ordinary day."

- 12 Although the proportions vary by province, Quang Ninh, which has the highest rate by far, is high for both males and females, evidence that these time-use data are probably reliable.
- 13 Probed knowledge is defined as recognition of a method after it has been described.
- 14 Little variability is found by age or province in the analysis of concerns about society; therefore, only aggregated data are presented here.
- 15 Married girls are excluded because young women often quit working at marriage; thus their absence from the labor force is more a reflection of social norms than a reflection of the state of the economy.
- 16 Those younger than 18 are included in the employment tables because the Vietnam Labor Code permits adolescents aged 15– 18 to work and guarantees them the same wages that adults make for a particular job (Edmonds and Turk 2002).
- 17 The text that introduces the idea of work in the survey reads as follows: "Some people take up jobs for which they are either paid in cash or given merchandise—food, for example—in exchange for their labor. Others work for themselves to earn money—by running a shop, for example, or making handicrafts. Still others work on a family farm or family business, even if they are not paid for this work." The question follows: "Have you ever done any of these things, or any other work?" For those answering "No" to the above: "So you have never done any work for which you were paid or given merchandise; you have never worked for yourself to make money; and you have never worked on a family farm or in a family business?" Thus, the definition of work includes anything the respondent considers work, including (potentially) subsistence work.
- 18 Data from the 1997–98 Vietnam Living Standards Survey (VLSS), a national survey conducted with technical assistance from the World Bank, indicate rates of "doing nothing" that are somewhat lower than those in the VASC, although they are still elevated. For example, among 15–22-year-olds resident in urban areas in the same six provinces, 14 percent of males and 17 percent of unmarried females are categorized as "doing nothing," compared with 18 percent and 19 percent in the VASC survey. Among outof-school respondents, 28 percent of males and 32 percent of unmarried females in urban areas are not working according to the VLSS, compared with 47 and 42 percent indicated in the VASC. (VLSS computations were performed by Sara Peracca and Sajeda Amin, Population Council.)
- 19 These rates are lower than those given in Table 4 because, in order to make the strongest case possible for our argument that HIV is not the major problem in the general population of adolescents, we present high estimates.

References

- Alan Guttmacher Institute (AGI). 1998. Into a New World: Young Women's Sexual and Reproductive Lives. New York: AGI.
- Anh, Nguyễn Quốc, Nguyễn Mỹ Huong, Daniel Weitraub, and Meredith Caplan. 1999. Adolescent Reproductive Health: Survey and Assessment of Knowledge, Attitudes and Practice of Adolescents in Hai Phong City about Related Reproductive Health Issues. Hanoi: Ban diếu hành dụàn.

- Behrman, Jere R. and James C. Knowles. 1999. "Household income and child schooling in Vietnam." The World Bank Economic Review 13(2): 211–256.
- Bélanger, Danièle and Khuat Thu Hong. 1998. "Young single women using abortion in Hanoi, Viet Nam." Asia-Pacific Population Journal 13(2): 3–26.
- . 1999. "Single women's experiences of sexual relationships and abortion in Hanoi, Vietnam." *Reproductive Health Matters* 7(14): 71–82.
- Birdsall, Nancy and Steven W. Sinding. 2001. "How and why population matters: New findings, new issues." In *Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World*. Eds. Nancy Birdsall, A.C. Kelley, and Steven W. Sinding. New York: Oxford University Press. Pp. 3–23.
- Bloom, David and David Canning. 2001. "Cumulative causality, economic growth, and the demographic transition." In *Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World*. Eds. Nancy Birdsall, A.C. Kelley, and Steven W. Sinding, New York: Oxford University Press. Pp. 165–197.
- Bruce, Judith and Barbara S. Mensch. 1999. "Taking back young lives: Policy issues for adolescent girls in the developing world." *Journal of the American Medical Women's Association* 54(3): 153–160.
- Bryant, John. 1998. "Communism, poverty, and demographic change in North Vietnam." *Population and Development Review* 24(2): 235– 269.
- Desai, Jaikishan. 1998. "Poverty and fertility in Vietnam." In Household Welfare and Vietnam's Transition. Eds. David Dollar, Paul Glewwe, and Jennie Litvack. Washington, DC: The World Bank. Pp. 277–318.
- Dollar, David and Jennie Litvack. 1998. "Macroeconomic reform and poverty reduction in Vietnam." In *Household Welfare and Vietnam's Transition*. Eds. David Dollar, Paul Glewwe, and Jennie Litvack. Washington, DC: The World Bank. Pp. 1–26.
- Edmonds, Eric and Carrie Turk. 2002. "Child Labor in Transition in Vietnam." *Policy Research Working Paper* No. 2774. Washington, DC: The World Bank.
- Glewwe, Paul and Hanan G. Jacoby. 1998. "School enrollment and completion in Vietnam: An investigation of recent trends." In *Household Welfare and Vietnam's Transition*. Eds. David Dollar, Paul Glewwe, and Jennie Litvack. Washington, DC: The World Bank. Pp. 201–234.
- ——. 2002. "Economic Growth and the Demand for Education: Is There a Wealth Effect?" Stanford University Center for Research on Economic Development and Policy Reform Working Paper No. 123. Stanford, CA: Stanford University.
- Goodkind, Daniel M. 1994. "Abortion in Vietnam: Measurements, puzzles, and concerns." *Studies in Family Planning* 25(6): 342–352.
- ———. 1995. "Vietnam's one-or-two-child policy in action." Population and Development Review 21(1): 85–111.
- Goodkind, Daniel and Phan Thuc Anh. 1997. "Reasons for rising condom use in Vietnam." *International Family Planning Perspectives* 23(4): 173–178.
- Haughton, Jonathan. 1997. "Falling fertility in Vietnam." *Population Studies* 51(1997): 203–211.
- Henshaw, Stanley K., Susheela Singh, and Taylor Haas. 1999. "The incidence of abortion worldwide." *International Family Planning Perspectives* 25 (supplement): S30–S38.

- Hirschman, Charles. 1994. "Family and household structure in Vietnam." Paper presented at the annual meeting of the Association for Asian Studies, Boston, 18–20 March.
- Hong, Khuat Thu. 1998. "Study on Sexuality in Vietnam: The Known and Unknown Issues." *Regional Working Papers*. Hanoi: Population Council.
- Hong, Khuat Thu and Tran Thi Phuong Mai. 1998. "Responding to the reproductive health needs of adolescents and youth in Vietnam." Country paper submitted to technical meeting INT/96/ P03 on "Reproductive Health Policy Makers and Researchers on RH Needs of Adolescents and Youth in the Asian Sub-region." Bangkok, 23–27 November.
- International Planned Parenthood Federation. 2002. "Gender equity, HIV/AIDS and football in Vietnam." http://ippfnet.ippf.org/ pub/IPPF_News/News_Details_s.asp?ID=1730>. Accessed 7 February 2002.
- Knodel, John, Phan Thuc Anh, Truong Viet Dung, and Dao Xuan Vinh. 1995. "Why is oral contraceptive use in Vietnam so low?" International Family Planning Perspectives 21(1): 11–18.
- Knodel, John and Gavin W. Jones. 1996. "Post-Cairo population policy: Does promoting girls' schooling miss the mark?" *Population and Development Review* 22(4): 683–702.
- Long, Lynellyn D., Lyn Nguyen Henderson, Le Thi Phuong Mai, and Carl Haub. 2000. *The Doi Moi Generation: Coming of Age In Vietnam Today*. Hanoi: Population Council.
- McCarthy, Terry. 2000. "The kids are all right." TIME 156(7/8): 74-77.
- Mensch, Barbara, Judith Bruce, and Margaret E. Greene. 1998. *The Uncharted Passage: Girls' Adolescence in the Developing World*. New York: Population Council.
- Merli, M. Giovanna. 1998. "Mortality in Vietnam, 1979–1989." Demography 35(3): 345–360.
- Montgomery, Mark R. et al. 2003. *Cities Transformed: Demographic Change and Its Implications In the Developing World*. Panel on Urban Population Dynamics, Committee on Population, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- Morrison, Donald. 2000. "Marching orders." TIME 156(7/8): 4.
- Nhan, Vu Quy and Ngo Dang Minh Hang. 1996. "Reproductive Behavior of Unmarried Urban Students of Age 17–24 in Vietnam." *Research Report Series*. Hanoi: National Committee for Population and Family Planning and Centre for Population Studies and Information.

- Population Council and the Institute of Sociology. 2000. *Adolescents and Social Change in Vietnam*. New York: Population Council.
- Schiffrin, Anya. 1999. "Vietnam's youth are losing focus of why the party never ended." *Asian Wall Street Journal* 16–17 July: 1,6.
- Singh, Susheela, Deirdre Wulf, Renee Samara, and Yvette P. Cuca. 2000. "Gender differences in the timing of first intercourse: Data from 14 countries." *International Family Planning Perspectives* 26(1): 21–28, 43.
- UNAIDS and WHO. 2000. *Report on the Global HIV/AIDS Epidemic.* Geneva: UNAIDS.
- United Nations. 2001. World Population Prospects: The 2000 Revision Volumes I and II. New York: United Nations.
- United Nations Development Programme (UNDP). 1998. "East Asia: From miracle to crisis." Staff paper. New York: UNDP.
- Van Phai, Nguyen, John Knodel, Mai Van Cam, and Hoang Xuyen. 1996. "Fertility and family planning in Vietnam: Evidence from the 1994 Inter-censal Demographic Survey." *Studies in Family Planning* 27(1): 1–17.
- Williamson, Jeffrey G. 2001. "Demographic change, economic growth, and inequality." In Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World. Eds. Nancy Birdsall, A.C. Kelley, and Steven W. Sinding. New York: Oxford University Press. Pp. 106–136.
- Willis, Brian M. and Barry S. Levy. 2002. "Child prostitution: Global health burden, research needs and interventions." *The Lancet* 359(9,315): 1,417–1,422.
- Wu, Lawrence L., Steven P. Martin, and Daniel A. Long. 2001. "Comparing data quality of fertility and first sexual intercourse histories." *The Journal of Human Resources* 36(3): 520–555.

Acknowledgments

An earlier version of this paper was presented at the annual meeting of the Population Association of America, Atlanta, 9–11 May 2002. Funding for this research was provided by the Economic Cooperation Bureau, Ministry of Foreign Affairs, Government of Japan; The Rockefeller Foundation; and the United Nations Fund for Population Activities. The authors received helpful comments from Sajeda Amin, Robert Miller, and Sara Peracca.