SURVEY COMPARISONS OF THE SEXUAL RISK BEHAVIOR OF YOUNG ADULTS IN THAILAND, VIETNAM AND THE PHILIPPINES

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Peter Xenos
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Introduction

This analysis draws upon the data from national surveys conducted in three countries of Southeast Asia, the Philippines, Vietnam and Thailand. The three surveys are: The Young Adult Fertility and Sexuality Study 3 (YAFS III), conducted in the Philippines in 2002; The Survey and Assessment of Vietnamese Youth (SAVY), conducted in Vietnam in 2003; and The National Sexual Behavior Survey of Thailand (NSBS), conducted in 2006. The surveys in the Philippines and Vietnam focused on youth (ages 15-27 and 14-25, respectively. The Thailand survey interviewed a sample of the general population aged 18-59. Young adults aged 18-24 were over-sampled, resulting in 3,024 youth cases. All three are nationally representative, probability samples, obtained within multi-staged, clustered sampling designs. For the purpose of comparison we have selected from each survey only young adult males and females aged 18-24 regardless of marital status or other characteristics. This results in 10,285 cases for analysis from the Philippines, 3,899 cases from Vietnam, and 3,024 cases from Thailand.

1 Sampling and other technical details on the Vietnam survey are provided in Ministry of Health (2005), chapter 2 on “Methodology.” The methodology of the Philippines survey is described in Raymundo and Cruz (2004), Annex A. Sample design for the Thai survey is given in Chamratrithirong et al. (2007).
The three countries provide many different social and cultural settings and thus form an interesting set of cases for our comparative purpose. Thailand is predominantly a Buddhist society with a unique Islamic culture in the South. Since the end of World War II, the influence of the West has increased considerably due to more open social, political and economic systems. The Philippines has been under the influence of Catholicism for centuries, but it also has a substantial influence of Islamic culture among the population in the Southern region. Vietnam has long been influenced by the Chinese culture and, since the middle of the 19th century, the impacts of French colonialism and then international socialism. The socialist economic system began to “open” markedly under the *Doi Moi* policy promulgated in 1986 (Long et. al. 2000; Werner 2000).

The three countries share some important similarities in that the majority of their populations are predominantly rural and largely live by means of small-scale agriculture. Recent social and economic development in these countries has resulted in increasing rural-to-urban migration and the rapid growth of many urban centers. Today each of the three countries has a dominant ‘metropolitan region’: Bangkok in Thailand, Ho Chi Minh City in Vietnam, and Manila in the Philippines. Since the middle of the 20th century or even before, formal education has been a focus of policy and national expenditure for each of these countries. All three are educationally advanced, though with different emphases. The three countries have also been exposed increasingly to the broad influences of globalization on work and income options, on media exposure, and the like. The surveys examined here document strong influences on youth in particular. In the comparative analysis presented here we cannot examine all the relevant aspects of social change, but we do manage systematic measurement of two crucial dimensions--urbanization, and educational attainment--which we take as proxies for a whole gamut of changes.

Finally, the three countries have had rather different experiences with HIV and AIDS. Thailand has had the longest experience with the epidemic, which was first recognized there in 1984 (Phanuphak et al, 1985). According to the U.N.’s “2006 Report on the global AIDS epidemic” 580,000 Thais
were living with HIV with an adult prevalence (ages 15-49) of 1.4%. Vietnam initially experienced HIV much later but the infection rate seems to be high so that by 2005, according to UNAIDS estimates, some 260,000 people were living with HIV including those who had full-blown AIDS. The current HIV prevalence among adults aged 15-49 is 0.5%. The Philippines, according to UNAIDS 2006 Report, seems to be less affected; it had 12,000 people living with HIV. The HIV prevalence among Filipinos aged 15-49 was below 0.1% (UNAIDS, 2006). HIV/AIDS certainly continues to be among the high-profile national problems of these countries, but each country is responding to this problem in its own way. Thailand, due to the magnitude of the problem it has long faced, is said to have stronger and at times more aggressive programs in response to the spread of the epidemic.

This paper proceeds as follows. After a brief description of the measures used in our analysis we give a descriptive account of young adults from the three countries focusing on the distribution by two key social variables, Residence and Level of Education. We then look at patterns in their sexual risk-taking by Residence and Level of Education. Finally, we present results of analysis to determine whether or to what extent the observed differences in sexual risk-taking behavior can be accounted for in terms of differences in social composition and country specific patterns of sexual risk. For this we employ logistic regression analysis.

The Measures

In this preliminary analysis sexual risk behaviors of young adults from the three countries are compared on the basis of a set of measures considered to be associated with different levels of sexual risk. For our purpose here, each of these measures is taken as a dichotomous variable consisting of ‘yes’ or ‘no’ responses, unless stated otherwise. These measures include:

1. Proportion of the sample young adults (aged 18-24 years) who ever had sex (EVERSEX)
2. Among all who ever had sex, proportion whose sexual debut was under age 18 (SEXUN18)
3. Among all who ever had sex, whose sexual debut was under age 16 (AEXUN16)
4. Among all in the sample, proportion who reported having first sex before marriage (EVERPMS)
5. Among those who ever had sex, proportion whose first sex was pre-marital (IFSEXPMS)
6. Among all whose first sex was pre-marital, proportion whose pre-marital sex took place under age 18 (PMSUN18)
7. Among those who ever had sex, proportion who use a condom at first sex (CON1SEX)
8. Among the respondents who ever had sexual experience, proportion whose first sexual partners were 4 years younger or older than they were. (AGAPSEX) Regardless of whether the respondent was older or younger, it is considered “sexual risk” if the age difference between the two partners was 4 years or more. The rationale behind this is that the greater the age difference between the sexual partners is, the greater is the risk since such age difference often have a negative influence on sexual negotiation.
9. The proportion of respondents with sexual experience who ever paid someone for sex, or was ever paid by someone to have sex. Payment for sex here includes either or both in-cash or in-kind (EVPAID)
10. Among all young adults regardless of whether or not they ever had sex, the proportion with a high level of sexual risk (ALLHIRSK). These are young adults who had premarital sex under the age of 18 with partners who were four years or more, younger or older, and used no condom.
11. Among all young adults who ever had sex, the proportion with a high level of sexual risk as just defined. (SEXHIRSK)

Table 1 gives percent distributions of young adults from three countries, by these measures of sexual risk behavior.
### Table 1: Distributions of Young Adults in Thailand, Vietnam, Philippines, by Measures of Sexual Risk

<table>
<thead>
<tr>
<th>Measures of Sexual Risk</th>
<th>Thailand</th>
<th>Vietnam</th>
<th>Philippines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion who ever had sex (EVERSEX)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.80</td>
<td>0.27</td>
<td>0.49</td>
</tr>
<tr>
<td>Female</td>
<td>0.63</td>
<td>0.35</td>
<td>0.41</td>
</tr>
<tr>
<td>Proportions having first sex under age 18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.61</td>
<td>0.10</td>
<td>0.45</td>
</tr>
<tr>
<td>Female</td>
<td>0.37</td>
<td>0.14</td>
<td>0.35</td>
</tr>
<tr>
<td>Proportions having first sex under age 16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.31</td>
<td>0.01</td>
<td>0.12</td>
</tr>
<tr>
<td>Female</td>
<td>0.09</td>
<td>0.02</td>
<td>0.08</td>
</tr>
<tr>
<td>Proportion with pre-marital sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.79</td>
<td>0.12</td>
<td>0.45</td>
</tr>
<tr>
<td>Female</td>
<td>0.44</td>
<td>0.02</td>
<td>0.24</td>
</tr>
<tr>
<td>Of those with sexual experience, if first sex was pre-marital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.98</td>
<td>0.40</td>
<td>0.90</td>
</tr>
<tr>
<td>Female</td>
<td>0.70</td>
<td>0.04</td>
<td>0.56</td>
</tr>
<tr>
<td>Proportion using condom at first sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.42</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Female</td>
<td>0.30</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>Level of risky pre-marital sex under age 18 (mean)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.15</td>
<td>1.40</td>
<td>2.15</td>
</tr>
<tr>
<td>Female</td>
<td>2.38</td>
<td>1.37</td>
<td>1.81</td>
</tr>
<tr>
<td>Proportion with high level of sexual risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.03</td>
<td>0.00</td>
<td>0.01</td>
</tr>
<tr>
<td>Female</td>
<td>0.06</td>
<td>0.00</td>
<td>0.05</td>
</tr>
<tr>
<td>Among those who ever had sex, proportion with high risk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.04</td>
<td>0.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Female</td>
<td>0.10</td>
<td>0.01</td>
<td>0.12</td>
</tr>
<tr>
<td>Proportion whose first sexual partners were 4 year younger or older</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.17</td>
<td>0.03</td>
<td>0.22</td>
</tr>
<tr>
<td>Female</td>
<td>0.44</td>
<td>0.45</td>
<td>0.46</td>
</tr>
<tr>
<td>Proportions who ever paid for sex, or were ever paid by someone to have sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.25</td>
<td>0.14</td>
<td>0.20</td>
</tr>
<tr>
<td>Female</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Social Background of Young Adults

For the present analysis we have utilized two basic socio-economic dimensions which other research has shown to be very important in distinguishing sub-groups of young people. These two dimensions, Residence and Level of Schooling, offer the advantage that they can be measured in essentially comparable fashion in each of the three national surveys. Our dimensions distinguish three residence categories: those living in the largest Metropolitan area (Bangkok, Manila, Ho Chi Minh City), those living in any other urban area, and those living in rural areas. Similarly, there are three education categories, dividing each national youth population into three groups. Low education includes those who completed primary/ lower secondary school or less. Mid education includes those who went to high school or equivalent level, but did not enter college, while high education includes those who began college or completed college.

Figures 1 and 2 show, for males and females respectively, that the three national young adult populations are quite dissimilar on these dimensions. In these figures the countries are ordered from the lowest standing overall (Vietnam) to the highest (the Philippines). Within each chart the darkest shading is for the “lowest” social background (closest to rural and/or low education). It is evident that in Vietnam the rural and/or low education categories are much more prevalent, while in the Philippines the urban is somewhat more prevalent and the highly educated are much more prevalent than in the other countries. For example, male young adults who had low educational levels and lived in rural areas made up 44 percent of Vietnam young adults, nearly 20 percent of Thailand young adults, but only 8 percent of Philippines young adults. At the other end of the continuum, those with high educational levels and metropolitan residence made up a negligible part of the male young adult population in Vietnam, while in Thailand this group made up 5 percent, and in the Philippines 9 percent. The same overall pattern of differences is evident for females (of Figure 2).

By examining Figures 1 and 2 for each country we can compare male and female young adults and recognize that within each country the joint distribution
of males and females by residence and education is broadly similar. The difference between males and females is very small but substantial differences between those in metropolitan (Bangkok, Ho Chi Minh City and Manila) versus rural areas are observed. These patterns reflect the relative equality of schooling levels by sex in these countries in recent years, and also the fact that in all three countries males and females share the same birth place distribution and that both are inclined to migrate to urban areas and especially the biggest cities.

These charts give us important background for an exercise in comparison among the young adults represented in these three national surveys. In the models reported subsequently we employ residence and education, as just defined, and Age, as predictors of a series of sexual risk-taking outcomes. Examination of the distributions on residence and education and age suggests that none of these will be important in distinguishing male from female risk-taking levels overall, but that both will be important in explaining differences among the countries. This expectation results in part from the important national differences in the distributions, and also from national differences in the pattern of levels across the social topography for each of a series of sexual risk-taking indicators. These patterns are examined next.
Figure 1  Distribution of the Male Population Aged 18-24, by Residence and Education: Vietnam, Thailand, and the Philippines
Figure 2: Distribution of the Female Population Age 18-24, by Residence and Education: Vietnam, Thailand, and the Philippines.
Patterns of Sexual Risk-taking

Young adults from Thailand, Vietnam and the Philippines are compared on three selected measures of sexual risk: (1) the proportion who ever had sexual experience, (2) the proportion whose first sexual experience was under age 18, and (3) the proportion of sexually active young adults who had first sex before marriage. These are examined here against social background as defined above in terms of Residence (metropolitan, other urban, and rural) and Levels of Education (low, middle, high).

Figures 3 and 4 show the prevalence of sexual experience among males and females from the three surveys. The data in Figure 3 reveal that Thai males are the most sexually active of all among the three countries. Regardless of social background, the proportions who ever had sex range from well above 70 to over 80 percent. Most active among Thai males are those in metropolitan and other urban areas with low education, and those in rural areas with high education. Filipino males are less active than Thais overall, and show a slightly different pattern across social background, with those from the metropolitan area who had middle and low education being most active. The highest proportion of Filipino males who ever had sexual experience is below 60 percent, much lower than among Thais among whom the level reaches 80 percent. Least active among young adult males are those from Vietnam. Here the highest proportion having sexual experience is below 50 percent with those having a high level of education being most active followed by the low and middle educational groups. Among females (Figure 4), somewhat similar distributions by education and residence are observed between Thailand and the Philippines. In all three countries it is females with low education in all residence categories who are most sexually active, with the highest proportion observed among those in metropolitan areas of Thailand and the Philippines (nearly 70 percent). Vietnamese females consistently report the lowest levels among youth in the three countries.

Some note must be taken when compare young adults on whether they ever had sexual experience that there are very different contexts for this experience. The indicator reflects any sexual experience regardless of when it occurs. Thus, for some it may be sex within marriage while for many others (especially males) it may be largely pre-marital. The differences observed in Figures 3 and 4 could be accounted for at least in part by the differences in timing of marriage among these countries.
Figure 3  Distribution of Young Adult Males Population Who Ever Had Sex, by Residence and Education: Vietnam, Thailand, and the Philippines
Figure 4: Distribution of Young Adult Females Population Who Ever Had Sex, by Residence and Education: Vietnam, Thailand, and the Philippines
In Figures 5 and 6 males and females are compared on whether their first sex was under the age of 18, which is a widely acknowledged risk category among youth. Here the country specific distributions are diverse. For Thai males, (Figure 5) the highest proportion is observed among those with low and middle education, respectively, regardless of where they live. For Filipino males, whose proportions are lower than for their Thai counterparts, a small difference is observed across the two social measures. In Vietnam, sexual experience before age 18 is relatively uncommon; the highest proportion of less than 20 percent is observed among those with the mid educational level living in the metropolitan area (Ho Chi Minh City). This is much a lower prevalence than that of the Thais (over 70 percent among those with low education living in metropolitan residence) and the Filipinos (nearly 50 percent among those with high education in metropolitan and other urban areas). For females, (Figure 6) sexual debut under age 18 is certainly less prevalent than among their male counterparts as seen in Figure 5. It is rather common among those who had low education, and this is observed across all residential areas of all the countries.
Figure 5  Distribution of Young Adult Males Population Who Had First Sex Before Age 18, by Residence and Education: Vietnam, Thailand, and the Philippines
Figure 6 Distribution of Young Adult Females Population Who Had First Sex Before Age 18, by Residence and Education: Vietnam, Thailand, and the Philippines
In a similar fashion, Figures 7 and 8 compare young adult males and females on pre-marital sexual experience, among those who ever had sex. As will be noticed, regardless of Residence and Educational background, sexual experience for Thai males under age 25, where it existed, was almost always pre-marital (Figure 7). The same is more or less true among Filipino males. Among the Vietnamese, however, the proportion having pre-marital sex is less prevalent and, with a few exceptions, seems to increase with educational level. Among females (Figure 8), the highest prevalence, as far as pre-marital sex is concerned, is observed among the Thais. Much lower prevalence is observed among Filipino females. In both Thailand and the Philippines, the prevalence of pre-marital sex among females increases with level of education. In Vietnam, on the other hand, pre-marital sex is near absent, except among those with metropolitan residence who are of the mid and high educational levels.

From Figures 5 and 6 and Figures 7 and 8 above it is evident that among Thai and Filipino young adults sex not only occurs at relatively early (i.e. under age 18) but where it occurs, it is also largely pre-marital. This pattern is most common among the Thai and least common among the Vietnamese, with the Filipinos falling in between. This country-specific different pattern is of interest to us for the sake of comparison which follows in the next section.
Figure 7  Distribution of Young Adult Males Whose First Sex Was Premarital, by Residence and Education: Vietnam, Thailand, and the Philippines
Figure 8: Distribution of Young Adult Females Whose First Sex Was Premarital, by Residence and Education: Vietnam, Thailand, and the Philippines.
Modeling Sexual Risk for Comparisions Among Countries

Our objective is to compare the three countries on a few of the possible dependent variables (risk level indicators), in a modeling context in which we can control on our background variables in a similar manner for each country. Because our dependent variable is dichotomous we have employed logistic regression and maximum likelihood estimation. All of our independent variables are dichotomies as well, expressing classifications on Country, Residence, and Education, and logistic regression readily handles explanatory variables in this form. Because of the considerable differences between males and females on most or all outcome variables for each of the countries, it seemed appropriate to treat the two sexes as separate populations within each country. Models were run separately for each. The data on young adults aged 18-24 in the three surveys were pooled into one file. In that file cases are weighted within each country to adjust for unequal sampling fractions, and between the countries to produce an equal number of cases per country. For each country/sex group, we present only the coefficients for Country, and the overall model results for the full model and a model that excludes country. The country coefficients are presented in the more intuitive multiple classification analysis (MCA) format (Retherford and Choe 1993: chapter 5) that indicates the adjusted country levels on the dependent variable. In this analysis only two of the dependent variables are examined: first sex under the age of 18; and, among those who report having had sexual experience, the proportion whose first sex was pre-marital. The results are presented in Table 2.

Our main interest centers on the question whether or to what degree the differences in outcome levels among the three countries are accounted for or explained by the combination of (a) the social composition differences highlighted by our cross-tabulation of residence, schooling level and age, and (b) country-specific patterns on sexual risk-taking outcomes. In this initial analysis we look at two outcome variables: first sex under the age of 18, and the experience of pre-marital sex among those who have had first sex. The first of these measures of sexual risk-taking combines patterns of early union formation and early sexual onset outside of unions (“pre-marital sex”). The second measure focuses upon the pre-marital sex element of sexual risk-taking.
### Table 2
Logistic Regression Results Comparing Countries, on Two Sexual Risk-Taking Indicators, by Sex

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Sexual Experience Under Age 18</th>
<th>Pre-Marital Sex, If Sexually Experienced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>Observed</td>
<td>Adjusted</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.61</td>
<td>0.36</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.45</td>
<td>0.89</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.10</td>
<td>0.53</td>
</tr>
</tbody>
</table>

(full equation includes Country, Age, Residence, Education Level: omitted categories are Thailand, Age 18, Rural and Low Education)

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**Overall Model Results**

(A) **Full Model**
- $-2\times\log \text{likelihood} = 2402.9040$  
- degrees of freedom $= 12$
- $-2\times\log \text{likelihood} = 1774.9130$
- degrees of freedom $= 12$
- $-2\times\log \text{likelihood} = 2402.9040$
- degrees of freedom $= 12$
- $-2\times\log \text{likelihood} = 2159.2970$
- degrees of freedom $= 12$

(B) **Full Model - Country**
- $-2\times\log \text{likelihood} = 2727.1880$
- degrees of freedom $= 10$
- $-2\times\log \text{likelihood} = 1952.9670$
- degrees of freedom $= 10$
- $-2\times\log \text{likelihood} = 2639.2120$
- degrees of freedom $= 10$
- $-2\times\log \text{likelihood} = 2626.6250$
- degrees of freedom $= 10$

(C) **Comparison of (A) & (B)**
- likelihood ratio $= 324.2840$
- chi squared significance level $= .001$
- likelihood ratio $= 178.0540$
- chi squared significance level $= .001$
- likelihood ratio $= 236.3080$
- chi squared significance level $= .001$
- likelihood ratio $= 467.3280$
- chi squared significance level $= .001$

**Note:** Estimated with SPSS v. 15 Logistic Regression; pooled sample of youth ages 18-24 from Thailand, Philippines, and Vietnam surveys; cases weighted within countries to adjust for unequal sampling probabilities, and between countries to yield an equal number of cases per country.
First Sex Before Age 18

There are large observed differences among the countries for each of the sexes (Table 2, columns 1 and 3). Sex under the age of 18 is far more common among Thai males (0.61) than among Filipino males (0.45) or among Vietnamese males (0.10). Among females, we find that the level for Thais (0.36) is virtually matched by Filipino females (0.35), while Vietnamese females have a much lower level (0.14). But, a model predicting this sexual risk-taking level on the basis of Residence, Education Level, Age and Country indicates that both the male and female levels among Filipinos are higher than among Thais, once the much higher schooling distribution and higher level of urban/metropolitan residence among Filipinos are taken into account. The Vietnamese levels are also much higher when the background characteristics are adjusted for, rising to nearly the Thai level for among males, and to well above the Thai level among females though for each sex the Vietnamese level is still well below that for Filipinos (Table 2, columns 2 and 4). For the comparison with the Philippines, these results carry the implication that, were Filipinos less urban and/or less educated, they would have a level of sex under age 18 much closer to the initially distinct Thai levels. Alternatively, as Thais reach the urban and schooling levels of Filipinos they could be expected, assuming all relationships remained unchanged, to have a somewhat lower level of sexual experience by age 18. For the comparison with the Vietnamese, the results suggest that the much lower levels of this risk outcome among Vietnamese is largely a reflection of their being far less urban and far less educated. As young Vietnamese move in urban and educated directions in future years, this risk factor can be expected to become more prominent.

The lower part of Table 1 provides a comparison of two models: the full model as just described, and a model which excludes Country. The likelihood ratios all are significant at the 0.001 level or greater, which indicates that the contribution of Country is statistically significant, even in the presence of all the other variables in the model.
Pre-marital Sex, Among Those with Sexual Experience

This measure of risk-taking focuses on the pre-marital component of overall sexual experience. We examine pre-marital sex separately on the possibility that underlying country differences, and/or the influences of Residence and Level of Education might be notably different for pre-marital sex. The observed patterns for males (column 5) indicate that in Thailand and the Philippines nearly all sexual onset under age 18 is pre-marital, compared with only 40 per cent pre-marital in Vietnam. Among females (column 7) about half the sexual onset under age 18 is pre-marital in Thailand and the Philippines, but only 20 per cent in Vietnam. The adjusted levels (columns 6 and 8) indicate that at least with regard to the characteristics examined here, the difference between Thailand and the Philippines is unaffected, whereas the much lower observed levels for Vietnam rise to the Thailand level or even much higher when Age, Residence and Education are adjusted for. Again for this dependent variable, a comparison of the two models (one with Country excluded) indicates that the contribution of Country to the results is statistically significant.

Discussion

The aim in this analysis has been systematic comparison among three surveys to bring out important differences among countries. To accomplish this we have employed relatively simple measures expressing Residence and Education dimensions of social and economic change. We have developed straightforward logistic regression models for each sexual risk outcome variable and for a combination of Country, Residence, Age and Education. Initial examination of patterns (depicted in Table 1 and Figures 1 through 8) indicated that males and females have systematically different outcome levels. Rather than incorporate Sex into models of the total youth population ages 18-24, we elected to model each of the sexes separately.

The modeling results highlight the underlying strength of country differences, quite apart from country levels on Age, Residence and Education. All equations are improved in a statistically significant manner when the country
variable is included. At the same time, the results point to some interesting and statistically important patterns of sexual risk across the 3 x 3 social landscape we have identified. There are both statistically significant differences across the landscape, and important differences in pattern among the countries. The complete comparison of these countries will elaborate the framework further by, for example, exploring for the presence of interaction effects. Nevertheless, the results presented here point to difference level of needs for sexual risk reduction among young adults in the three countries.

It is appropriate, we feel, to conclude with the suggestion that three national surveys of recent vintage should provide a bigger array than they do of social and economic background variables to incorporate into these kinds of comparison.

References


