Social Change and Premarital Sexual Behavior and Attitudes

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INTRODUCTION

Dramatic changes have characterized Vietnam during the past several decades, including prolonged periods of war, socialist collectivization, political reunification, economic renovation, and an extensive opening to the outside world. While the economic consequences of these changes are well documented, the social ramifications have received little empirical attention. Despite the lack of empirical data, social observers and commentators, international organizations, and the media have been quick to speculate on the resulting implications, particularly for Vietnam's adolescents and young adults. Despite recent fertility reductions, Vietnam has a young age structure, and young people between ages 14 to 25 are the largest demographic segment, comprising a quarter of the total population. This concentration of the population at younger age groups highlights the need to better understand the attitudes and behavior of this group, and the necessity for data-based, rather than speculation-based, assessments.

The recent social changes Vietnam has experienced are believed to have resulted in changes in both attitudes and behavior regarding premarital sex. Although long considered a social taboo, and defined by the government as a 'social evil', there is a widespread belief that younger generations are more accepting of premarital sex and have high rates of premarital sexual activity. The few empirical studies available, however, do not indicate that premarital sex is widespread in Vietnam (Mensch, Clark, & Dang Nyugen Anh, 2002). We use recently available, nationally representative data from the Survey and Assessment of Vietnam's Youth (SAVY) to examine the prevalence of premarital sexual activity and attitudes regarding the acceptability of premarital sex among adolescents and young adults aged 14 to 25. In assessing current behavior and attitudes towards premarital sex, we examine differences by geographic

location and demographic characteristics. We also speculate on the potential implications of the mass media on the attitudes and behavior of adolescents and young adults.

BACKGROUND

Explanations of Social Change

Dramatic family changes have occurred worldwide, and these changes have been extensive not only their geographic scope but also in the dimensions affected. Of particular interest to demographers have been changes in sexual behavior and fertility, and explanations for these changes involve both structural and ideational perspectives. Structural explanations emphasize alterations in the cost-benefit calculus, attributed variously to shifts from agricultural to industrial to a service economy, the movement of populations from rural to urban areas, increases in income, changes in technology, increases in knowledge, and declines in disease and mortality. The fundamental argument of these theories is that changes in the social and economic circumstances and constraints- for example, industrialization and the expansion in education- have ramifications throughout society. On the other hand, other scholars argue that cost-benefit changes alone are insufficient to produce the observed changes in family behavior, and that other forces may also be at play (Caldwell, 1982; Cleland & Wilson, 1987; Freedman, 1979).

Along with structural changes, ideational dimensions have also been identified as important and central in shaping demographic behavior (Jayakody, Thornton, & Axinn, 2008). Ideation refers to new ways of thinking and ideational change requires that individuals are in contact with ideas and information they had not previously encountered. Suggested mechanisms for spreading new ideas include educational institutions (Caldwell, 1982; Thornton & Fricke,

1987), increased migration, travel and tourism (Bongaarts & Watkins, 1996), gossip networks (Watkins & Danzi, 1995), and the mass media (Bongaarts & Watkins, 1996). Television is specifically designed to transmit new ideas and information and may be a particularly powerful source of ideational change. Television has been described as one of the most powerful idea disseminators, socializing agents, and public opinion molders in the contemporary world (Kottak, 1991), and televisions power to change attitudes and behavior has long been assumed (Kottak, 1990; Westoff, 1999). Furthermore, new ideas transmitted through television often transcend traditional barriers of language and literacy. New models of social interaction and family behavior are introduced through television, and these new ideas are often labeled as modern and defined as good (Hornick, 2001).

Rather than being competing alternatives, structural and ideational explanations are interrelated and reinforcing (Jayakody et al., 2008). Ideational frameworks that specify approaches for experiencing and living with reality must take into account the economic and social systems bounding that reality. Similarly, ideational frameworks may modify those economic and social systems. Be it through structure or ideation or a combination of both, the dramatic changes experienced in Vietnam over the past few decades may have influenced premarital sexual attitudes and behavior in ways that may depart from traditional norms.

Social Change in Vietnam

Vietnam is the second most populous country is Southeast Asia, with a population of 80.9 million and a per capita income around \$553 (General Statistics Office, 2003). The society is multi-ethnic with substantial ethno-cultural diversity. The majority group, the Kinh, comprise approximately 86% of the population with 53 different ethnic minority groups making up the remaining 14%. Ethnic minorities are those who have Vietnamese nationality and reside in

Vietnam, but who do not share the identity, language, and other cultural characteristics with the Kinh (World Health Organization, 2003). Vietnam remains primarily an agricultural society; agriculture comprises the largest economic sector, accounting for about a quarter of the gross domestic product (Central Institute for Economic Management, 1999) and employs 63 percent of the labor force. Reflecting this agricultural base, the population remains largely rural (in 2003 74% of the population lived in rural areas)(General Statistics Office, 2005), although the pace of urbanization is increasing (National Committee for Population, 2003).

Vietnam has experienced dramatic social, economic, and political changes in its recent history. With French colonization in the 19th Century, Vietnam was divided into three areas: Cochinchina (southern Vietnam), Annam (central Vietnam), and Tonklin (northern Vietnam). Under the leadership of Ho Chi Minh, the Democratic Republic of Vietnam declared independence from the French in 1945, leading to 9 years of armed struggle. The Geneva Accord, signed in 1954, ended French control and called for a temporary division of the country, with the southern half ruled from Saigon by a Vietnamese regime with heavy U.S. support, and Ho Chi Minh's party ruling northern Vietnam from Hanoi (Duiker, 1995).

The North and the South had distinctly different economic structures and political frameworks. The Democratic Republic of Vietnam in the North focused on building a socialist economy whereas the South followed a modified capitalist model. The North faced substantial agricultural problems due to its lack of mechanization, and per capital rice production in the North was one of the lowest in Asia (Duiker, 1995). Ho Chi Minh's government focused on efforts to stabilize state ownership and to collectivize. By the 1960s collectivization was well under way and 80% of families in lowland districts belonged to semi-socialist or fully socialist collective organizations. By 1965, 90% of the industrial and agricultural sector was under state

or collective ownership (Duiker, 1995). Food production gradually grew but never reached targeted goals, and food shortages were common.

The escalation of war between the U.S. and North Vietnamese communist units began in 1963, officially ending in 1975 and resulting in the country being unified under the communist government into the Socialist Republic of Vietnam. The economy faced substantial problems during this post-unification period, including poor infrastructure, insufficient capital, excessive bureaucratic controls, high inflation, and massive foreign debt. Reunification was followed by a decade of economic crisis. The country's economic growth rate in the latter half of the 1970s was an unimpressive 0.4%. In the early 1980's Vietnam was one of the poorest countries in the world, with 7 out of 10 Vietnamese living in poverty (World Bank, 1999). State industrial control and land collectivization resulted in low production and the country relied heavily on aid from socialist allies.

Responding to this economic crisis, the Communist Party introduced its policy of *doi moi* (renovation) in 1986. In contrast to reform systems undertaken by the former Soviet Union and Eastern European states, which centered on political reform, Asian socialist countries have concentrated on economic liberalization and growth (Norlund, Gates, & Dam, 1995). *Doi moi* involved extensive restructuring in three interrelated areas: (a) transforming the administratively planned economy into a market economy; (b) establishing international economic relations, particularly with non-Soviet countries; and (c) mounting bureaucratic reforms aimed at eliminating corruption, increasing efficiency, and establishing law-based governance. Similar to efforts in China and the former Soviet Union, agricultural decollectivization and free-market reforms were the center piece of reform efforts.

"Vietnam's development [since renovation] represents one of the more dramatic turnarounds in economic history" (Dollar & Litvack, 1998, p. 1). The success of renovation policies is well documented: the gross domestic product grew by nearly 9% annually; inflation fell from 400% in 1987 to 17% by 1994; Vietnam went from being a rice importer to the second largest rice exporting country in the world; and there were substantial poverty and living standards improvements (Haughton, Haughton, & Phong, 2001; Lamb, 2002). The economic success of renovation policies are well illustrated by the dramatic drop in the share of the population living on less then \$1 per day—while in 1981 58% of Vietnam's population lived on less than \$1 per day, by 2001 this had declined to only 3%.

Adolescents and the Media

Along with structural explanations highlighting economic and political changes, another aspect of *doi moi* often mentioned as leading to change is the increased presence of foreign media. Market reforms have introduced new media, and the new images and ideas introduced through the media are believed to have contributed to increased sexual permissiveness, premarital sexual activity, sexually transmitted infections, unintended pregnancy, and abortion (Ghuman, Loi, Huy, & Knodel, 2006). In fact, access to television has grown rapidly in Vietnam, with 79% of urban households and 50% of rural households owning a television.

Media messages, particularly those from the West, are thought to substantially change young people's attitudes. Given the developmental tasks required during adolescence, it may be that young people are particularly susceptible to media messages. For example, a core developmental task during adolescence is identity formation, and media messages may be particularly influential in two key areas: gender role identity and sexuality. The explicit images of television role models may influence adolescents as they absorb images of what it means to be

a man or a woman (Steele & Brown, 1995). Television can also become an important source of sexual socialization, dramatically impacting adolescents' beliefs about sexual attractiveness, heterosexual interactions and relationships, sexual knowledge and behavior.

Some argue that television and movies serve as a sexual super peer providing information and models about sexuality (Brown, Halpern, & L'Engle, 2005; Strasburger & Wilson, 2002).

New ideas about opposite sex relationships and the social models of adolescents on television may have important implications for adolescent sexuality. Adolescents are especially fascinated by depictions of male-female relationships, using television to learn sexual and romantic scripts (Brown, Childers, & Waszak, 1990). Television promotes certain sex roles and behavior, and depictions of adolescents on television provide models for attitude formation and behavior imitation (Chapin, 2000). Particularly in cultures where heterosexual interactions are limited and there is reticence about discussing sexual values and behavior, television can become the most accessible and compelling source for sexual information.

Premarital Sexual Activity and Attitudes

There is the widespread belief in Vietnam that attitudes among the young have shifted dramatically away from the Confucian ideal of chastity before marriage and that more and more young people are engaging in premarital sexual activity. In fact, one reporter asserted that "sex before marriage- 'eating rice before the bell', as it is sometimes called- is now the norm" (McCarthy, 2000, p. 74). Sexual attitudes and activity are of substantial concern in a country facing increasing rates of HIV. About 50% of HIV infections occur in young people, and 40% of those living with HIV/AIDS are between the ages of 15 and 24 (The National Committee for AIDS Drug and Prostitution Prevention and Control, 2004). High rates of unplanned pregnancies and high rates of abortion further fuel public and governmental concern on young

people's sexual activity. The government has labeled premarital sex a 'social evil' (along with drug abuse, prostitution, gambling, and crime). The perception of widespread sexual activity among young people was further disseminated and discussed during a recent scandal involving a young television star. Thuy Linh was the star of the very popular TV show Vang Anh's Diaries, where she played a high school girl that was modern and stylish, but also determined to uphold traditional virtues. A 16 minute video showing her and her former boyfriend in bed, both apparently aware that they were on camera, was released on the internet. The Vietnam state-owned television station VTV-3 promptly canceled the show after airing Thu Linh's humiliating farewell in which she acknowledged the mistakes she had made and apologized to her parents, teachers, friends and fans. Discussions surrounding this incident focused on how sex and gender roles in Vietnam are quickly changing as satellite TV and the internet bring Western influences to Vietnam. VietnamNet, a popular on-line newspaper, said the episode underscores "the dark side of globalization" and warned people that a flood of foreign influences "threaten Vietnam's cultural foundation" (Stocking, 2007).

Despite this public concern and speculation on rising rates of premarital sexual activity, little empirical research has documented the prevalence of premarital sexual activity and the attitudes that young people have towards this issue. Much of what is known comes from convenience samples of young people or from women interviewed at abortion clinics (Ghuman et al., 2006). Estimates from a larger, more representative sample is available from a survey of adolescents in 6 provinces, indicating that by age 22 about 29% of unmarried men and about 16% of unmarried women have had sex (Mensch et al., 2002). As the authors note, these proportions are much lower than those reported in the Philippines, Thailand, and all 32 countries in Latin America and Sub-Saharan Africa in which Demographic and Health Survey data is

collected (Mensch et al., 2002).² These prior studies fail to provide information on the country as a whole or how attitudes and behavior may differ by geographic locale or demographic characteristics. We use recently available, nationally representative data to examine the prevalence of premarital sex among Vietnamese youth and their attitudes towards premarital sex. This information is vital for assessing the accuracy of reports on a "sexual revolution" in Vietnam. In examining differences, we are particularly interested in differences by urban status.

We hypothesize that attitudes and behavior regarding premarital sex will vary by urbanicity. Theoretical explanations of family change highlight the influence of urbanization as urban lifestyles and attitudes may differ from the traditional ideal, and the context and influence of globalization is heightened in urban areas. Urban areas may also offer young people more freedom to spend time alone together and to provide greater recreational activities aimed at the young. Furthermore, Vietnam's post-renovation economic growth provides evidence of increasing inequality by rural/urban residence. While renovation has clearly resulted in a dramatic poverty declines (for example, consumption poverty fell from 54% in 1992-1993 to 37% in 1997-1998 (World Bank, 1999)) and improvements in human development indicators (Justino & Litchfield, 2003), this economic growth success story masks rising economic disparities (Glewwe, Gragnolati, & Zaman, 2002; Minot, Baulch, & Epprecht, 2003; Nguyen & Popkin, 2003; World Bank, 1999). There are also substantial differences in poverty by rural/urban area, with urban areas having lower poverty rates and sharper poverty declines. While urban households enjoyed a 64% poverty decline between 1992-1993 and 1997-1998, the decline for rural households was only half that (Justino & Litchfield, 2003). In fact, Liu's (2001)

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² Comparable figures using the Vietnam Demographic and Health Survey are not possible because the Vietnam survey was limited to married respondents.

calculations indicate that increases in rural/urban inequality account for 76% of the increase in total inequality between 1992-1993 and 1997-1998 (Liu, 2001).

DATA

The Survey Assessment of Vietnamese Youth (SAVY), collaboration among the Vietnamese Ministry of Health, the Vietnam General Statistics Office, the World Health Organization, and the United Nation Children's Fund, was designed to provide information on the experiences and attitudes of Vietnamese youth. The survey sampled 7,584 youth aged 14 to 25 (born between 1978 and 1989) and is a sub-sample of households in the 2002 Vietnam Living Standards Survey. The nationally representative sample covers the country's eight economic regions, and oversamples the largest cities, Hanoi and Ho Chi Minh City (formerly Saigon), to increase statistical power and allow for urban to rural comparisons. The sample does not include those living in special circumstances, such as barracks, re-education centers, social protection centers, factories, or dormitories.

To insure interview quality, interviewers received extensive training and technical assistance from the supporting organizations. The questionnaire drew from previous questionnaires that were successful in the region and was field-tested with a diverse segment of young people. Each respondent was interviewed in a private place, and the interviewer was the same sex as the respondent. Many respondents were unfamiliar with questionnaires and therefore the interviewer and the respondent sat side-by-side so that the respondent could observe the questionnaire and the coding process. Ethnic minority youth were interviewed using interpreters. The total interview process including the self-administered portion generally took between 60 and 80 minutes.

Married and unmarried respondents were asked slightly different questions about premarital sex. Married respondents were asked directly whether they ever had premarital sex and their age at the time. Unmarried individuals were asked whether they have ever had sex with anyone, and if yes, their age at the time. The collection of accurate data on sexual experiences poses several challenges. Because premarital sex is considered socially taboo in Vietnam, respondents may be unwilling to provide information about their behavior. Furthermore, women may be particularly reticent about answering questions on premarital sex. In an attempt to avoid this problem, SAVY had a two-part questionnaire which included both an interviewer-administered portion and a self-administered portion. Information regarding sensitive issues, including sexual experiences and attitudes towards premarital sex, was collected using a self-administered component, administered after the interviewer was confident that the respondent understood the questionnaire process and could correctly code responses. The self-administered portion was completed with the help of the interviewer if the respondent was unable to complete it on his or her own.

We also examine attitudes towards premarital sex. SAVY includes several attitudinal questions, asking respondents whether or not premarital sex is acceptable under a variety of conditions: (1) Premarital sex is acceptable if two persons are willing; (2) Premarital sex is acceptable if the two people love each other; (3) Premarital sex is acceptable if two persons are about to marry; (4) Premarital sex is acceptable if two persons are mature; and (5) Premarital sex is acceptable if the woman can be prevented from getting pregnant. For our multivariate examination of attitudes, we focus on a dichotomous measure of acceptability indicating whether respondents think premarital sex is acceptable if the two persons are willing.

Also included is information on the accuracy of information on HIV/AIDS and awareness of sexually transmitted infections, using 15 items. A scale measures the accuracy of information that the respondent has about HIV/AIDS. This scale was divided into three categories indicating low accuracy, medium accuracy, and high accuracy. Respondents were also asked whether they had heard about a range of 9 sexually transmitted infections (hepatitis B, gonorrhea, syphilis, trichomonas, genital warts, herpes, cranuloma, chancroid, and Chlamydia) in addition to HIV. Again, this was divided into low, medium, and high in terms of how many STIs the respondent had heard of.

We are particular interested in potential differences between urban and non-urban areas. There are several urbanicity measures in SAVY for various ages: where the respondent was born, the area he/she mostly lived between ages 8 to 14, and his/her current location. We use a combined measure indicating the area where they lived most while growing up (age 8 to 14) and where they currently live. SAVY codes include urban big city (Hanoi and Ho Chi Minh City), urban other city, town, and rural area. Our urbanicity measure indicates growing up in a big city and currently residing in a big city, compared to all other categories.

RESULTS

Table 1 provides basic descriptive information on the SAVY sample. Our sample is split relatively evenly between males and females. Reflecting the agricultural nature of the country, almost 90% of respondents did not grow up in urban areas and are not currently residing in urban areas. Strong educational differences are apparent. Although 61% of non-urban men and 66% of non-urban women have less than a secondary school education, for urban men and women these figures are 35% and 28%, respectively.

Behavior: Had Premarital Sex

We begin by using life table techniques to examine the risk of engaging in premarital sexual activity. Prior research using SAVY have presented a frequency distribution on those engaging in premarital sex by a particular age. However, when examining sub-group differences frequency distributions are less useful because the duration of risk for engaging in premarital sexual activity is heavily dependent on marriage age. Individuals that marry young have a shorter risk duration for premarital sexual activity than individuals that marry at later ages. The life table calculates the probability that a person will have premarital sex at a given age, and removes them from the risk of premarital sex when they have premarital sex, marry, or reach the end of the study date.³ Figure 1 is based on life table analysis and presents the cumulative proportion of individuals that have had premarital sex by age 18, by age 21, and by age 25. Estimates are presented separately by sex and urban location (See Figure 1). Results indicate substantial differences by both sex and urban location. Results indicate that premarital sexual activity among individuals 18 and under are very rare, with less than 5% of individuals aged 18 and younger experiencing premarital sexual activity. By age 21, about 22% of men living in large urban centers had engaged in premarital sexual activity, compared to 18% of men not living in large urban cities. By age 26, 42% of men, regardless of location, had engaged in premarital sexual activity. Rates for women were substantially lower. While men in large urban cities had higher rates of premarital sexual activity, among women those in large urban areas had lower rates. By age 21 while about 5% of women in large urban areas had premarital sex, among women not in large urban cities the corresponding proportion was 8%. By age 25, 8% women in

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³ Life table techniques also make use of the full sample. A frequency on the proportion having sex by age 21, for example, is limited to those in the sample aged 21 and over.

large urban cities reported premarital sexual activity while for women not in large urban areas the proportion was double at 16%.

Although these life table results provide important information on the probability of experiencing premarital sex and the cumulative proportion having had premarital sex, they treat individuals as a homogeneous group. That is, subgroup differences beyond sex and geographic area are not taken into account. In order to examine the impact of covariates on the probability of experiencing premarital sex, discrete time models for event history analyses are used. Rather than modeling the hazard rate directly, discrete-time event history models involve an approximation of the hazard, expressed as:

$$P_{it} = Pr[T_i = t \mid T_i \ge t, x_{it}]$$

This is the conditional probability that an event (premarital sex) will occur at time t to individual i, given that the event has not occurred prior to time t, where x_{it} is a vector of explanatory variables. The explanatory variables include both time constant and time varying covariates.

Event history analysis is concerned with the patterns and correlates of certain events. The time constant correlates we include are: mother's and father's education, measured as a dichotomous variable indicating whether they had an upper secondary school or higher education; whether they lived in an urban area for most of the time when they were aged 8 to 14; whether they had less than a secondary school education at the time of the survey; whether they are a member of the Kinh majority group; their sex; and an index of family ownership of items. The included time varying covariate is school attendance, indicating whether or not the individual was attending school during that time interval. The results are presented in Table 2. Results indicate that men are 3.5 times more likely to have premarital sex than are women. Individuals that spend most of their time in urban areas between ages 8 to 14 were 40% more

likely to engage in premarital sex. Education is also significantly associated with the risk of having premarital sex. Those with less than a secondary education are 50% more likely to have premarital sex than those with higher levels of education. However, those that are currently attending school are 40% less likely to have premarital sex.

Attitudes: The Acceptability of Premarital Sex

Turning to attitudes on premarital sex (See Table 3), men were 2.6 times more likely than women to agree that premarital sex was acceptable as long as two people were willing. Large urban differences in attitudes were evident, with individuals that lived in urban areas while growing up and currently live in urban areas being 1.5 times more likely to agree that premarital sex was acceptable. Figures 2 and 3 are presented to further illustrate some of the findings by calculating the predicted probability of saying premarital sex is acceptable if two people are willing. These predicted probabilities are based on the multivariate model presented in Table 3 and include all the variables in the model. As indicated by Table 3, there are significant differences in attitudes towards premarital sex by sex, urban area, marital status, and current school enrollment. Figure 2 focuses on differences by marital status, sex, and urban area. As illustrated, those who are most accepting of premarital sex if both people are willing is urban, married men—58% of them said it was acceptable. Single, married, urban men reported lower levels of acceptability (35%). Among women, almost half of married, urban women indicated acceptability of premarital sex (48%). Rural, single women were the least likely to indicate that premarital sex was acceptable (20%). Figure 3 focuses on differences by urban area, sex, and school enrollment status. Those indicating the highest degree of acceptability of premarital sex are urban men that are not currently enrolled (54%); the lowest level of acceptability was reported by women in non-urban areas that are currently enrolled in school (18%).

Knowledge: Accuracy of HIV Information

Using the 15 questions about information on HIV, we use an ordered logit model to examine the impact of our covariates on the level of the respondent's accurate information on HIV is low, medium, or high (See Table 4). As the model indicates, no significant differences between respondents growing up and living in urban areas with those in other areas were found. Men were more likely to have higher levels of accurate knowledge than women. Education level was also significantly related to the accuracy of knowledge. A particularly strong finding in the model is the significant difference in the level of accurate knowledge between the Kinh and ethnic minority groups. Figure 4 illustrates this finding by calculating the predicted probabilities for each level of the dependent variable for men and women and for Kinh and ethnic minorities. All other covariates in the model are held constant at their mean. As displayed, having a low accuracy of information is higher among both ethnic minority men and women. Similarly, having a high level of accurate knowledge of HIV is substantially higher among the Kinh than ethnic minorities.

Finally, we examine respondents knowledge of sexually transmitted infections by examining the number they have heard of. We group this range into low, medium, and high and the ordered logit results are presented in Table 5. No significant differences were evident between urban and other areas. Men were less likely to have heard of a higher number of STIs, and higher levels of education were associated with having heard of a higher number of STIs. Again, differences between Kinh and ethnic minority groups are evident, and this difference is illustrated in Figure 5. These results reveal that ethnic minority groups have a higher probability of having heard of a low number of STIs compared to Kinh, whereas Kinh have a higher probability of having heard of a high number of STIs. In addition to these ethnic differences, it

is important to note the low level of STI knowledge overall. Among all respondents, the proportion having heard of a high number of STIs is relatively low.

DISCUSSION

Current public and media discussions suggest young people in Vietnam have rejected their grandparents and parents social norms and attitudes on premarital sex and have embarked on a sexual revolution. While social changes are occurring in Vietnam, it is important to understand the current status using empirical data. Premarital sex among adolescent and very young adults in Vietnam is quite low by comparative standards. By age 21, only 22% of urban men and 18% of non-urban men had engaged in premarital sex. Among women the proportions are even lower, at 5% for urban women and 8% for non-urban women.

The multivariate results highlight the differences in the risk of having premarital sex by key demographic variables. Controlling for all other variables in the model, the risk of having premarital sex is higher in urban areas. Young people in urban areas may have greater opportunities for premarital sex, either in the greater mobility and privacy afforded by urban areas or because of they experience less supervision and monitoring by their parents.

Additionally, they also have more accepting attitudes towards premarital sex.

Much discussion in Vietnam has centered on changing behavior and attitudes among adolescents and young adults in Vietnam regarding premarital sex. Public and media discussions depict premarital sex widespread and argue that this represents a dramatic departure from the past. In particular, foreign influences, especially foreign television, is blamed for this perceived erosion in 'traditional' behavior. However, assessing change in Vietnam is difficult because of the lack of longitudinal data. It is not possible to evaluate whether the current findings on the

rate of premarital sex represents a break from the past. In order to speculate on potential changes, we highlight prior findings on premarital sex from a survey specifically designed to assess family changes in Vietnam.

Using data from the Vietnam Surveys of Family Change (VSFC), we can assess trends in premarital sexual behavior in Vietnam's recent past from a representative sample. The VSFC was administered to married individuals who married during three different marriage cohorts. The first cohort, the war cohort, married between 1963 and 1971, representing the period during Vietnam's war for reunification. For the North, aggressive collectivization efforts and mass mobilization characterized this period. The reunification cohort married between 1977 and 1985, the early post-unification period when economic hardship and social upheaval was most severe and when a centrally planned economy was pervasive. The renovation cohort married between 1992 and 2000, the years when economic reforms and the opening up of Vietnam to global influences was well underway. Even though *Doi Moi* passed in 1986, it was not until the early 1990s that the implementation of the reform efforts brought noticeable change.

The results on reported premarital sexual activity are presented in Figure 6 and indicate increases in premarital sex among both men and women across the three cohorts examined. For example, among urban men, 19% in the war cohort reported premarital sexual activity, compared to 26% in the reunification cohort and 40% in the renovation cohort. It is important to note that the VSFC data was based on already married individuals and so differs substantially from the SAVY sample. Despite these differences, the data on premarital sexual activity among urban men in the VSFC is not much different from rates of premarital sexual activity reported by urban men in SAVY by age 25 (See Figure 1). Therefore, it does appear that premarital sexual activity has increased. However, this increase is part of a long-term trend rather than a recent

development. The VSFC clearly show increases from the war to reunification cohort, with additional increases among the renovation cohort.

Just as there are behavioral differences, attitudinal differences in the acceptability of premarital sex are evident between urban and non-urban respondents. Both male and female urban respondents express more acceptability towards premarital sex than their non-urban counterparts. On the other hand, attitudes towards premarital sex are also relatively conservative with almost half of all respondents in all categories expressing disapproval. This information, combined with the data on behavior, does not provide support for the idea of a sexual revolution in Vietnam. While speculation on television's negative influences abound, it does not appear that adolescents and young adults in Vietnam have dramatically changed their attitudes and behavior.

Mensch and colleagues (2003) argue that there has been too much preoccupation on premarital sexual behavior among adolescents in Vietnam to the detriment of other issues relevant to this population. To further investigate this issue, we examined the accuracy of knowledge that individuals had about HIV/AIDS and there level of awareness on sexually transmitted infections. Although our initial hypothesis was that there would be differences between urban and other areas, and while this hypothesis held for behavior and attitudes towards premarital sex, no differences in urban area were found for the accuracy of knowledge about HIV/AIDS or the awareness of sexually transmitted infections. Our results reveal a mixed picture. First, we found stark disparities between Kinh and ethnic minority groups in the accuracy of information they had. Ethnic minority men and women were significantly less likely to have high levels of accurate information and significantly more likely to have low levels of information. Additionally, levels of accurate information were relatively low. Only about 50%

of Kinh men and women had high levels of accurate information. This was substantially lower for ethnic minority individuals; 34% of minority men and 31% of minority women had high levels of accurate information.

This disparity between Kinh and ethnic minority groups is in line with other documented disparities. While the Kinh primarily inhabit the fertile delta regions (the Red River Delta in the north and the Mekong Delta in the south) and coastal plains, Vietnam's ethnic minority groups primarily reside in mountainous areas. Although only 14% of the population, ethnic minorities account for 30% of Vietnam's poor and about 75% fall below the international poverty line (compared to 31% of Kinh)(United Nations, 2002). Estimates indicate that while 4% of Kinh have consumption that is so inadequate as not to meet even basic nutritional needs, this figure was 33% among ethnic minorities (Swinkles & Turk, 2006). Ethnic minorities are less well served by the health care system (Desai, 2000)—they are far less likely to receive prenatal care, to be assisted by a doctor/midwife/nurse during birth, to consult a health care provider when a child is sick, or to vaccinate children (Baulch, Chuyen, Haughton, & Haughton, 2002).

The current finding on the disparity between Kinh and ethnic minority youth highlight the potential role of the media. Although public discourse in Vietnam has focused on the evils of television and the foreign messages being imported, television can also serve as an important source for information and education on reproductive and sexual health. Indeed, the Vietnam government has specific plans to use television to disseminate information, including information on HIV/AIDS and family planning, via television and a recent policy decree called for all villages in Vietnam to have television access by 2015. When SAVY respondents were asked where they had heard about topics such as family planning, pregnancy and menstruation, gender and sexual relationships, and love and marriage the overwhelming source for information

was the mass media, and television in particular. Figure 7 displays where SAVY respondents had received information from. Not only are minority men and women less likely to hear about these topics from the media, but they are also less likely to hear about then form their parents, and professionals (professionals include teachers, health workers, and family planning volunteers). Particularly in cultures that are reticent to discuss issues of sexuality, television can be a very important source of information.

Clearly, there are both positive and negative aspects to television with respect of adolescent and young adult sexual and reproductive health knowledge. The developmental tasks required in adolescent may lead to television's influence being particularly significant for this group. For example, identity formation is a key developmental task during adolescence and researchers hypothesize that television may have significant influence in gender role identity and sexual identity formation. Public concern focuses on the imported models of sexuality and gender relations depicted on television and its potential influence on young people. Television promotes certain sex roles and behavior, and depictions of adolescents on television provide models for attitude formation and behavior imitation (Chapin, 2000). Particularly in cultures where heterosexual interactions are limited and there is reticence about discussing sexual values and behavior, television can become the most accessible and compelling sources of sexual information (Arnett, 1995).

Of course, access to television differs between Kinh and minority adolescents and young adults. Television has expanded rapidly in Vietnam, and 79% of urban households and 50% of rural households have television. Although cost remains a barrier to ownership, television access is limited primarily by the lack of electricity. With \$220 million for rural electrification from the World Bank, coverage has grown from 50% in 1996 to 79% in 2006. However, further

expansion requires electricity provision to remote, mountainous areas not easily connected to the national grid (Malhotra, 2005). It is in these remote, mountainous areas where ethnic minority individuals primarily live. Although ethnic minority individuals were included in the SAVY sample, it is important to keep in mind that the sampling frame used by SAVY was the same as that used by the Vietnam Living Standards Survey. The geographic areas in the sampling frame that include minorities are those that are more accessible and that contain a larger population concentration. As such, they do not represent a representative sample of ethnic minority people in Vietnam. The estimates provided here for ethnic minorities, therefore, are conservative in the sense that they likely underestimate the disparities between the Kinh and ethnic minority groups.

CONCLUSION

Public and media discussions in Vietnam center on the dramatic changes in sexual behavior and attitudes among today's youth and imply that a sexual revolution is taking place. Data from SAVY, however, do not provide evidence for this view. Adolescents and young adults in Vietnam have relatively low levels of premarital sex and express generally conservative views towards it. Vietnam has experienced dramatic social changes over the past few decades, and young people today are growing up in a world very different from that in which their parents grew up. Concern and emphasis, however, would be better placed on ensuring that all young people are receiving adequate and accurate information on sexual and reproductive health. Our results indicate substantial ethnic differences to where substantially more effort needs to be focused on providing ethnic minority youth with information. In particular, when available, television seems a ready source to provide this information.

The power of television should not be underestimated. As preparation for a larger study on the causal impacts of television on young people's sexual attitudes and behavior using a randomized experiment, we conducted focus groups and semi-structured interviews in two, remote, rural villages inhabited by the Khmu ethnic minority group. Because of rural electrification funds from the World Bank, one village received electricity 5 months prior to our visit. The other village had yet to be electrified. Topics in the electrified village focused on how electricity had changes their lives and community. Although a few older men noted how electricity had impacted agricultural production (i.e., using electricity to pump water into the fields), the majority stressed the introduction of television. While only 14% of households owned a television 5 months after electrification, almost all villages watched nightly, crowding into a house that contained a television. This is a 'captive' audience waiting for information that may be unavailable from other sources. As one 16 year-old explained, "Television is very educational. It teaches us how to kiss and do things with boys".

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 Table 1. Descriptive Information⁴

Image: Contract of the	Table 1. Descriptive Information ⁴					
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Currently enrolled in school 43.1% 56.2% 45.4% 57.5% 37.4% Kinh 85.7% 99.1% 84.5% 99.6% 83.5% Region 25.7% 27.4% 25.1% 27.5% 25.9% Mekong River Delta 19.8% 3.9% 22.2% 7.7% 21.0% Other regions 54.4% 68.7% 52.7% 64.8% 53.0% Age at marriage (among those married) 20.0 21.9 20.9 20.9 19.5 Age at first sex (among those with sexual experience) 19.7 19.6 20.0 20.5 19.4 Premarital sexual activity among married Partner was someone other than future spouse 22.2% 36.8% 36.7% 19.6% 14.8% Premarital sexual activity among unmarried 4.9% 14.8% 7.3% 2.1% 0.9%	Secondary School	30.9%	39.9%	31.8%	39.9%	27.9%
Kinh 85.7% 99.1% 84.5% 99.6% 83.5% Region 25.7% 27.4% 25.1% 27.5% 25.9% Mekong River Delta 19.8% 3.9% 22.2% 7.7% 21.0% Other regions 54.4% 68.7% 52.7% 64.8% 53.0% Age at marriage (among those married) 20.0 21.9 20.9 20.9 19.5 Age at first sex (among those with sexual experience) 19.7 19.6 20.0 20.5 19.4 Premarital sexual activity among married Partner was someone other than future spouse 22.2% 36.8% 36.7% 19.6% 14.8% Premarital sexual activity among unmarried 6.0% 14.3% 16.1% 0.00% 1.1%	More than secondary school	8.7%	26.1%	6.8%	31.8%	5.7%
Region 25.7% 27.4% 25.1% 27.5% 25.9% Mekong River Delta 19.8% 3.9% 22.2% 7.7% 21.0% Other regions 54.4% 68.7% 52.7% 64.8% 53.0% Age at marriage (among those married) 20.0 21.9 20.9 20.9 19.5 Age at first sex (among those with sexual experience) 19.7 19.6 20.0 20.5 19.4 Premarital sexual activity among married pouse 22.2% 36.8% 36.7% 19.6% 14.8% Premarital sexual activity among unmarried spouse 4.9% 14.8% 7.3% 2.1% 0.9%	Currently enrolled in school	43.1%	56.2%	45.4%	57.5%	37.4%
Red River Delta 25.7% 27.4% 25.1% 27.5% 25.9% Mekong River Delta 19.8% 3.9% 22.2% 7.7% 21.0% Other regions 54.4% 68.7% 52.7% 64.8% 53.0% Age at marriage (among those married) 20.0 21.9 20.9 20.9 19.5 Age at first sex (among those with sexual experience) 19.7 19.6 20.0 20.5 19.4 Premarital sexual activity among married spouse 22.2% 36.8% 36.7% 19.6% 14.8% Premarital sexual activity among unmarried spouse 4.9% 14.8% 7.3% 2.1% 0.9%	Kinh	85.7%	99.1%	84.5%	99.6%	83.5%
Red River Delta 25.7% 27.4% 25.1% 27.5% 25.9% Mekong River Delta 19.8% 3.9% 22.2% 7.7% 21.0% Other regions 54.4% 68.7% 52.7% 64.8% 53.0% Age at marriage (among those married) 20.0 21.9 20.9 20.9 19.5 Age at first sex (among those with sexual experience) 19.7 19.6 20.0 20.5 19.4 Premarital sexual activity among married spouse 22.2% 36.8% 36.7% 19.6% 14.8% Premarital sexual activity among unmarried spouse 4.9% 14.8% 7.3% 2.1% 0.9%	n :					
Mekong River Delta Other regions 19.8% 54.4% 68.7% 52.7% 64.8% 53.0% Age at marriage (among those married) 20.0 21.9 20.9 20.9 19.5 Age at first sex (among those with sexual experience) 19.7 19.6 20.0 20.5 19.4 Premarital sexual activity among married Partner was someone other than future spouse 22.2% 36.8% 36.7% 19.6% 14.8% 16.1% 0.00% 1.1% Premarital sexual activity among unmarried spouse 4.9% 14.8% 7.3% 2.1% 0.9%		25.70/	27.40/	25 10/	27.50/	25.00/
Other regions 54.4% 68.7% 52.7% 64.8% 53.0% Age at marriage (among those married) 20.0 21.9 20.9 20.9 19.5 Age at first sex (among those with sexual experience) 19.7 19.6 20.0 20.5 19.4 Premarital sexual activity among married partner was someone other than future spouse 22.2% 36.8% 36.7% 19.6% 14.8% Premarital sexual activity among unmarried 6.0% 14.3% 16.1% 0.00% 1.1% Premarital sexual activity among unmarried 4.9% 14.8% 7.3% 2.1% 0.9%						
Age at marriage (among those married) Age at first sex (among those with sexual experience) Premarital sexual activity among married Partner was someone other than future spouse Premarital sexual activity among unmarried Age at first sex (among those with sexual 19.7 19.6 20.0 20.5 19.4 20.0 20.5 19.4 20.0 20.5 19.4 20.0 20.5 19.4 20.0 20.5 19.4 20.0 20.5 19.4 20.0 20.5 19.4 20.0 20.5 19.4 20.0 20.5 20.5 20.5 20.5 20.5 20.5 20.5	•					
Age at first sex (among those with sexual experience) Premarital sexual activity among married Partner was someone other than future spouse Premarital sexual activity among unmarried 4.9% 14.8% 7.3% 2.1% 0.9%	Other regions	54.4%	68./%	52.7%	64.8%	53.0%
Premarital sexual activity among married Partner was someone other than future spouse Premarital sexual activity among unmarried 4.9% 14.8% 7.3% 21.9% 14.8% 7.3% 2.1% 0.9%	Age at marriage (among those married)	20.0	21.9	20.9	20.9	19.5
Premarital sexual activity among married Partner was someone other than future spouse 22.2% 36.8% 36.7% 19.6% 14.8% 6.0% 14.3% 16.1% 0.00% 1.1% Premarital sexual activity among unmarried 4.9% 14.8% 7.3% 2.1% 0.9%	Age at first sex (among those with sexual	19.7	19.6	20.0	20.5	19.4
Partner was someone other than future spouse 6.0% 14.3% 16.1% 0.00% 1.1% spouse 14.8% 7.3% 2.1% 0.9%	experience)					
Partner was someone other than future spouse 6.0% 14.3% 16.1% 0.00% 1.1% spouse 14.8% 7.3% 2.1% 0.9%	Premarital sexual activity among married	22 2%	36.8%	36.7%	19.6%	14.8%
	Partner was someone other than future					
Contraceptive methods known 5.6 6.0 5.3 6.7 5.8	Premarital sexual activity among unmarried	4.9%	14.8%	7.3%	2.1%	0.9%
	Contraceptive methods known	5.6	6.0	5.3	6.7	5.8

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⁴ Based on weighted data.

Table 2. The Risk of Having Premarital Sex

	Odds ratio	b	s.e.
Intercept		-2.86	0.08
Male	3.5	1.25***	0.04
Kinh	0.69	-0.37***	0.05
Less than secondary school	1.50	0.40***	0.05
Mother's education	1.19	0.18**	0.05
Father's education	1.10	0.10	0.04
Attending school	.59	-0.54***	0.03
Ownership	1.04	0.05	0.06
Grew up and now living in urban area	1.39	0.33***	0.05

^{**}p<.01; ***p < .001

Table 3. Attitudes Towards Premarital Sex if Two People Are Willing: Binary Logit Model

Table 5. Attitudes Towards Fremari	Odds ratio	b	s.e.
Intercept		-2.35	0.23
Male	2.63	.97***	.05
Age	1.05	.05***	.01
Kinh	1.05	.05	.07
Completed secondary school	1.13	.12	.07
Education past secondary school	1.39	.33**	.10
Mother's education	0.97	03	.07
Father's education	1.08	.08	.06
Attending school	0.76	28***	.04
Ownership	1.05	.04	.06
Grew up and now living in urban area	1.53	.44***	.08
Married	1.40	.34***	.06
			1

^{**}p<.01; ***p < .001

Table 4. Accuracy of Knowledge of HIV/AIDS: Ordered Logit Model

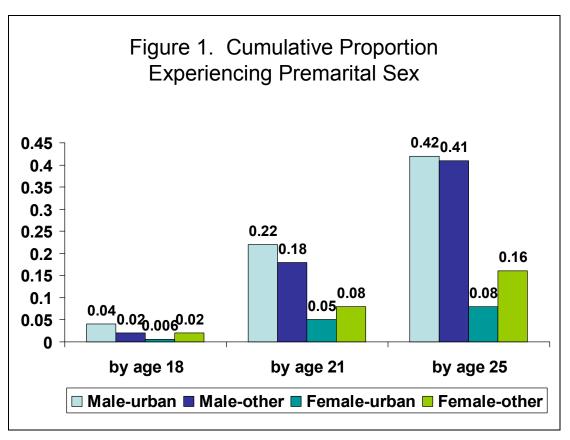
Table 4. Accuracy of Knowledge of 1	b	s.e.
Male	0.15**	.05
Age	0.06***	.01
Kinh	0.91***	.06
Completed secondary school	0.45***	.06
Education past secondary school	0.24	.09
Mother's education	08	.07
Father's education	.11	.06
Attending school	0.17*	.07
Ownership	0.12	.05
Grew up and now living in urban area	-0.15	.06
Married	-0.03	.07
Cutpoint1	-2.87	
Cutpoint2	2.15	

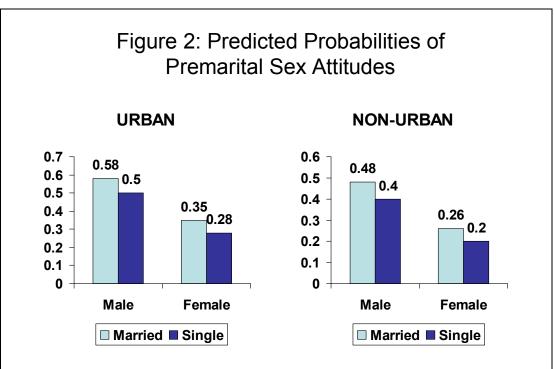
^{**}p<.01; ***p < .001

Table 5. Awareness of Sexually Transmitted Diseases: Ordered Logit Model

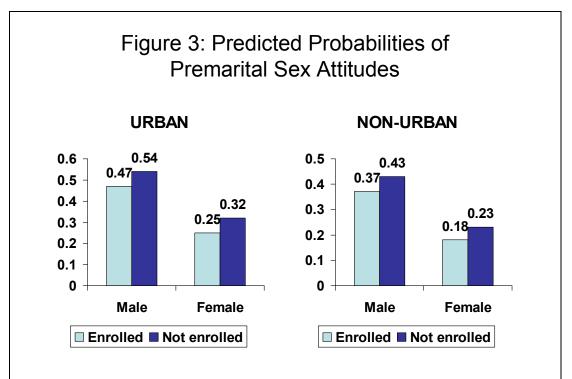
Table 3. Awareness of Sexually Transini	b	s.e.
Male	-0.29***	.04
Age	0.14***	.01
Kinh	0.29***	.06
Completed secondary school	0.90***	.06
Education past secondary school	1.37***	.09
Mother's education	0.22	.07
Father's education	0.15	.06
Attending school	.01	.06
Ownership	0.14	.05
Grew up and now living in urban area	02	.06
Married	0.77***	.08
Cutpoint1	2.39	
Cutpoint2	4.48	

^{**}p<.01; ***p < .001





NOTE: Other variables in the model include age, mother's education, father's education, education level, ethnicity, ownership, and current enrollment status. The predicted probabilities are calculated holding these variables constant at their mean.



NOTE: Other variables in the model include age, mother's education, father's education, education level, ethnicity, ownership, and marital status. The predicted probabilities are calculated holding these variables constant at their mean.

