

**Before First Sex:
Gender Differences in Emotional Relationships and Physical Behaviors
Among Adolescents in the Philippines**

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Abstract

In developing countries, most studies concerning early sexual activity focus on the age at first sex with little focus on the patterns of emotional relationships and sexual behaviors leading up to first sexual intercourse. These patterns could help identify factors that lead to delayed first intercourse and subsequent sexual risk behaviors. Gender differences in precoital behavior could point to important cues about how to prepare boys and girls for impending sexual activity. The precoital activities of 2,051 adolescents ages 17 to 19 in the Philippines are examined using data from the Cebu Longitudinal Health and Nutrition Survey. Only 31% of boys and 20% of girls has ever had sex by age 19, but a majority of the adolescents is engaging in dating, courting, romantic relationships, hand-holding, and kissing. This study found significant gender differences. Male adolescents in the Philippines engage in each emotional relationship and in sexual intercourse at earlier ages than females do. They also progress through these stages at a faster pace than females do. After they begin courting, romantic relationships, and dating, there are several years before they have sex, providing an ideal opportunity to prepare adolescents to ensure they are making informed choices about sexual intercourse. This window of opportunity is longer for females than males. The current analysis also finds that fast pace of emotional relationships is a strong predictor of younger age at first sex among girls, but not among boys. In contrast, males who have few emotional relationships are less likely to have sex at a younger age.

Introduction

Studying the progression towards first sexual intercourse will improve the understanding of adolescent sexuality in the developing world and aid in identifying and preventing risky sexual behaviors. Studies in the developing world point to early age at first sex as a risk factor for HIV infection or unplanned pregnancy (Blanc and Way 1998; Magnani et al. 2001; Pettifor et al. 2004; Zaba et al. 2002; Zaba et al. 2004). It is likely, however, that the predictors of poor reproductive health outcomes surface much earlier than at the time of first sex.

Miller and colleagues argue that the category of not being sexually active is too broad and that studying more detailed behaviors before first sex can provide useful insight into their potential risk (Miller et al. 1997). For example, their cross-sectional study of US adolescents aged 14-17 who have not had sex found that those who engage in more precoital behaviors, such as kissing and petting, are significantly more likely to anticipate having sex in the next year than those who do not engage in precoital behaviors.

Data on precoital behavior in the Philippines are rare, as most data such as the Young Adult Fertility Survey (YAFS) focus on sexual intercourse (Raymundo and Cruz 2004). Studies in several other cultures have found that there are common patterns in the progression towards sexual intercourse and that there seems to be consistency in the sequence that adolescents experience precoital behaviors (Lam et al. 2002). This order represents one way of characterizing the degree of sexual activity engaged in by adolescents (Hansen, Paskett and Carter 1999). Adolescents experience these milestones, however, at different ages in different cultures. Further, males and females reach each precoital behavior at different ages, with males significantly earlier than females in most countries (Lam et al. 2002; Youn 1996; Zulkifli, Low and Yusof 1995).

Hansen and colleagues used data from 1,493 female and 1,073 male black and white adolescents in the US aged 12–19 to develop the Adolescent Sexual Activity Index (ASAI), the first measure of sexual activity that explicitly uses Guttman scaling to rank sexual behaviors as the basis of scale creation. The ASAI is an 11 point index that reliably describes a broad spectrum of adolescent sexual behaviors. The ASAI index places sexual activities in the following general order: hugging, spending time, holding hands, kissing, cuddling, laying down together, and being undressed together, all of which precede sexual intercourse for both males and females. In the US, the scale has shown high internal consistency and reliability (Cronbach's Alpha = 0.93). The authors found the females and younger adolescents generally had lower scores on the scale than males and older adolescents. They suggest that the ASAI can be used in other populations to assess how close they are to initiating sexual activity (Hansen et al. 1999).

Other studies in Malaysia, Korea, Hong Kong and Slovenia confirm that there is a gradual order in precoital activities (Lam et al. 2002; Pinter and Tomori 2000; Youn 1996; Zulkifli et al. 1995). A limitation of the studies done among students and in schools may underestimate the true prevalence of precoital behaviors since those who have dropped out of school are more likely to have engaged in these behaviors. The present study examines behaviors that occur up to and including sexual intercourse in the Philippines. is community based, and includes adolescents in school and out.

This analysis has several aims: first, to understand precoital behaviors of Filipino adolescents and to understand how boys and girls differ in their behaviors. Based on studies in other countries, it is hypothesized that boys engage in precoital behaviors earlier and the tempo of these precoital behaviors is faster. Second, this analysis aims to understand whether there is a consistent order in the pattern of precoital behaviors, and it is hypothesized that a single predominant pattern will evolve, as found by Hansen and colleagues. Third, this study aims to understand what factors are associated with having first sex and experiencing precoital behaviors quickly, called fast tempo, in this study.

Adolescent sexual behavior in the Philippines

Premarital sex is generally not approved of in the Philippines, even in the engagement period. The majority of Filipino women have first sexual intercourse after marriage. Nevertheless, premarital sex is becoming more common especially in urban areas, as are many other intimate behaviors such as dating and kissing (Medina 2001; Raymundo and Cruz 2004).

Group dating is a common practice among Filipino youth to initiate acquaintances with the opposite sex particularly in urban areas (Raymundo, P.Xenos and Domingo 1999). Adolescents usually first go out on group dates beginning around ages 13 to 16 and then go on single dates a couple of years later (Medina 2001). National data from 1994 reveal that by age 20, 44% of the single women and 63% of the single men had been in a serious relationship and by age 24, 60% of women and 68% of men had been in a serious relationship (Xenos 1997). Thus, romantic involvement and sexual activities start off slowly and are facilitated and supported by peers.

There are significant different expectations about sexuality by gender. Girls are made to feel guilty about their sexuality, while boys are encouraged to engage in sexual activities (Cruz,

Laguna and Raymundo 2001; Medina 2001; Santa Maria 2002). Males initiate in dating and sexual activities sooner than females. Men are allowed more freedom related to sexuality than women. Many Filipino youth consider it natural for males to have multiple partners (Medina 2001; Santa Maria 2002). In contrast, social norms about young women's behavior tend to be conservative. Females are expected to control and set limits on male sexuality (Medina 2001; Santa Maria 2002). Philippine society continues to uphold the value of "hiya" or shame which deeply influences the behavior of girls and women (Cruz et al. 2001). Young people believe that females should adhere to strict roles in dating. Subtle flirting is acceptable but not outright wooing of men. Norms provide that women must be chaste, pure, and untouched at the time of marriage (Medina 2001).

The average age at first sex is still relatively high, compared with developed countries and many other developing countries (Singh et al. 2000). It has reduced slightly over time from 18 in 1982 and 1994 to 17.5 in 2002. Demographic and Health Survey (DHS) data find later ages of first sex: in 1993 the reported median age at first intercourse among women ages 25-49 was 21.8; in 1998 reported median age at first intercourse was 22.1 (National Statistics Office (Philippines) and Macro International 1994, 1999). Thus, there is a cohort effect, where social norms have changed substantially since the respondents were adolescents. These figures are retrospective however, and may be subject to recall bias.

An analysis of age at first sex in 14 countries using DHS data found that both male and female 15 to 19 year olds and 20 to 24 year olds in the Philippines had the lowest rates of sexual experience (Singh et al. 2000). The proportion of Filipino youth who have had sex before age 15, however, has increased eight-fold from less than 2% in 1994 to about 16% in 2002 (Commission on Population and United Nations Population Fund 2003). Therefore, age at first sex is most likely declining in the Philippines.

Methods

Data Collection

The Cebu Longitudinal Health and Nutrition Survey (CLHNS) provides the data for the present study. The CLHNS began as a joint endeavor of the Carolina Population Center, University of North Carolina at Chapel Hill, the Nutrition Center of the Philippines, Manila, and the Office of Population Studies, University of San Carlos, Cebu City. It is part of an ongoing study of a cohort of Filipino women who gave birth between May 1, 1983 and April 30, 1984. The CLHNS followed all women pregnant in 1983-84 and their newborns (the index children) in Metro Cebu. The study initially included over 3,000 women and includes follow-up surveys conducted in 1991-92, 1994-95, 1998-2000, and 2002. The CLHNS follow-up surveys in 1998-2000 and 2002 also included expansive interviews with the now adolescent index children. Earlier on, the study focused on nutrition and feeding practices, but over time has expanded to include modules on schooling, work, and reproductive and sexual health.

All surveys were conducted as approved by the University of North Carolina School of Public Health Institutional Review Board for research involving human subjects and the 2002 survey was also approved by The Johns Hopkins Bloomberg School of Public Health Committee on Human Research.

Most adolescents were interviewed in their homes. In some cases, it took the interviewers several visits to the household or to other households to complete the interview. On average each interview took a total of two sessions making up a total of 2.5 hours to complete. One part of the adolescent survey was self-administered, where respondents were asked to identify the drawing that most resembles their physical maturation.

Attrition

The 1998-2000 survey included 2,117 adolescents. By 2002, 101 of these adolescents were lost to follow up mainly due to out migration. In the 2002 survey, however, 35 index children (children of the mothers in the original sample) who were not captured in the 1998-2000 survey, were located and added back to the sample. The final sample in 2002 included 2,051 adolescents.

Instruments

Both the 1998-2000 and 2002 adolescent surveys included questions regarding experience of precoital behaviors including crushes, courting, being in a relationship, dating, and holding hands. Data on whether the adolescent experienced petting, kissing, or sexual intercourse are available only from the 2002 survey because these questions were not asked of all the adolescents in 1998-2000. The 1998-2000 survey asked only some of the adolescents if they had ever kissed, petted, or had sex, and therefore complete data are unavailable.

Unlike studies of precoital behaviors in other countries, the CLHNS includes questions with a focus on relationships (i.e. courting, dating, etc), in addition to particular sexual activities, (i.e. kissing, petting, etc) thus providing richer data for the description. For example, the adolescents were asked about their definitions of emotional relationships in both surveys, and their responses from 2002 are reported here.

Data Analysis

The data analysis was done in three parts. First, the progression through emotional and physical relationships are described. Second, the timing and tempo of the behaviors are described. In this step, scales were created to measure how quickly adolescents were moving through emotional relationships and physical behaviors, based on the ages and prevalence of experience for each item. Third, bivariate analyses are conducted to examine the characteristics that are associated with ever having had sex and multivariate analyses are conducted to examine the characteristics associated with age at first sex, taking into account several socio-demographic factors.

Results

The final sample included 2,117 adolescents ages 14 to 16 in 1998-2000 and 2,051 adolescents ages 17 to 19 in 2002 (see Table 1). Because of survey implementation issues the 1998-2000 round of the CLHNS was conducted with all girls first and then boys.

	1998-2000		2002	
	Males	Females	Males	Females
Age (mean)	15.58	14.55	18.18	18.19
Urban (%)	71.53	72.10	74.38	73.91
Church attendance 3-4 times/month or more (%)	58.92	72.00	39.85	58.32
Highest Grade Completed (mean)	8.65	8.72	9.72	10.83
N	1110	1007	1089	962

I. Progression through Emotional Relationships and Physical Behaviors

Emotional Relationships

Table 2 shows the progression through emotional and physical relationships by survey round and gender. Gender differences in emotional relationships are apparent in 1998-2000 but many of the differences are no longer significant when asked again in 2002.

In 1998-2000 most of the adolescents reported having had a crush on someone of the opposite sex, with 87% of girls and 82% of boys ever having had a crush. Crushes were nearly universal by 2002. When asked in 2002 how they define a crush almost half of the adolescents said that it is an attraction or fascination towards attitudes, physical aspects, abilities, or talents in another person. Another 40% said it was a liking or fondness for another person, and another 19% said they believe a crush is admiration or appreciation for another. There were no gender differences in the distribution of definitions.

Between 1998-2000 and 2002, the proportion who have courted someone or have been courted rises from 43% to 91% among girls and from 35% to 83% among boys. Differences between boys and girls are significant in both surveys. When asked in 2002 how the adolescents define courting, 32% said it is expressing one's feelings towards the person he or she liked, 24% of adolescents said it was liking, fondness, or attraction towards a girl or boy and 13% said it was being in love with someone.

Dating and romantic relationships seem to occur nearly simultaneously in this sample. Just over a quarter of adolescents (27%) have been in a romantic relationship in 1998-2000 and this proportion rises to three-fourths of the sample (75%) by 2002. Significantly more females had had a romantic relationship than males in 1998-2000. When asked again in 2002, many more males had been in a romantic relationship and the difference was no longer significant. Among the females who have had romantic relationships in 2002, 84% had older partners. Among those who have been in a romantic relationship, most of the boys (63%) and girls (60%) have had one or two romantic partners, and the rest had more. Two boys and a girl reported having 20 or more romantic partners.

Table 2. Proportion of adolescents experiencing emotional relationships and physical behaviors

	1998-2000			2002		
	Males (N=1,110)	Females (N=1,007)	<i>p</i>	Males (N=1,089)	Females (N=962)	<i>p</i>
Mean Age at Interview	15.58	14.55	NS	18.18	18.19	NS
Emotional Relationships						
Crush	81.53	86.49	0.002	98.90	99.06	NS
Courtship	36.31	42.50	0.003	83.10	90.64	<0.001
Dating	35.14	22.84	<0.001	72.08	69.23	NS
Romantic relationship	34.05	18.37	<0.001	75.21	75.26	NS
Physical Behaviors						
Holding hands	37.21	27.31	<0.001	89.07	87.73	NS
Kissing	NA	NA	—	71.99	65.18	<0.001
Petting	NA	NA	—	53.72	33.58	<0.001
Sexual intercourse	NA	NA	—	30.76	19.54	<0.001

NA= Not asked in the interview

NS=Not statistically significant at the $p<0.05$ level

Approximately 23% of girls have ever been on a date in 1998-2000 and 69% have been on a date in 2002. Among the boys, 35% have been on a date in 1998-2000 which rises up to 72% by 2002. In the earlier survey significantly more females have ever been on a date than boys. When asked again in 2002, the difference was no longer significant because many more boys report having gone on a date. When asked what they understand by the word “date,” there was wide variation, but one-third said they thought it meant going out alone with a boyfriend or girlfriend, 27% said a date was simply talking alone with boyfriend or girlfriend, and another 15% said they thought a date was going out and talking with an admirer. The distribution of definitions did not differ greatly between boys and girls.

When asked in 2002 about their first date, girls were significantly more likely to report that their first date was as a group (36% for girls vs. 23% for boys). Girls were also significantly more likely than boys to report that their first date was chaperoned (18% for girls vs. 10% for boys). Boys were significantly more likely to report that their first date was without a chaperone (67% for boys vs. 46% for girls).

The specific activities of their first dates varied widely, but the most common was going to the mall, plaza, or school ground and eating together, with 29% of girls and 23% of boys who have ever been on a date reporting having done so. Significantly more boys reported just talking on their first date (25%) than girls (17%). Just 10% of boys and 12% of girls reported going to a movie alone on their first date.

Physical Behaviors Including Sexual Intercourse

There also were significant differences in experience of physical behaviors between boys and girls (see Table 2). Among the sample, 37% of boys and 27% of girls had held hands in 1998-2000, a difference that is statistically significant. By 2002 the difference is no longer significant, with 89% of boys and 88% of girls ever having held hands. In 2002, significantly more males have engaged in physical behaviors. (Data on these physical behaviors are incomplete for the 1998-2000 survey.) Almost 72% of boys and 65% of girls have ever kissed, 54% of boys and 34% of girls have ever engaged in petting.

The 2002 survey also reveals that significantly more males have engaged in each physical activity than females. Over a fourth of the sample (25%) has ever had sex; significantly more males (30%) report having had sex than females (20%).

Of those who had sex, 97% of girls and 48% of boys reported that their first time was with their current boyfriend or girlfriend. Almost 6% of boys and 3% of girls had sex with a previous romantic partner and 41 of boys and less than 1% of girls said they had sex with someone outside the relationship (unpaid). Finally, 5% of boys (n=14) and no girls said they paid for sex the first time. Among those who had sex, 24% of boys and 37% of girls had sex for the first time at their partner's house, another 13% of boys and 28% of girls had sex for the first time at their own homes, and another 12% of both boys and girls had sex at a rented cottage, hotel, inn, or prostitute's den.

II. Timing and Tempo of Emotional Relationships and Physical Behaviors

Kaplan-Meier Plots

Figures 1 and 2 show the age at which the males and females engaged in each of the behaviors in a graphic, based on the 2002 data. They show that both males and females have their first crushes early, well before other intimate behaviors. In general, males and females experience their first courtships, their first romantic relationships, and their first dates around the same age, within a few years of one another. Then there is a considerable amount of time before they have first sex but this gap is even longer for girls than for boys. In general, there are larger gaps between events among females than males. These results indicate that when adolescents begin engaging in emotional relationships, sexual intercourse is likely to follow within several years, therefore marking an ideal time to ensure that adolescents have the information and skills to have sexual intercourse. This window of opportunity is even larger for females than for males. In addition, the median age at first sex had not been reached in either males or females, although significantly more males report having sex by age 19.

Figure 1

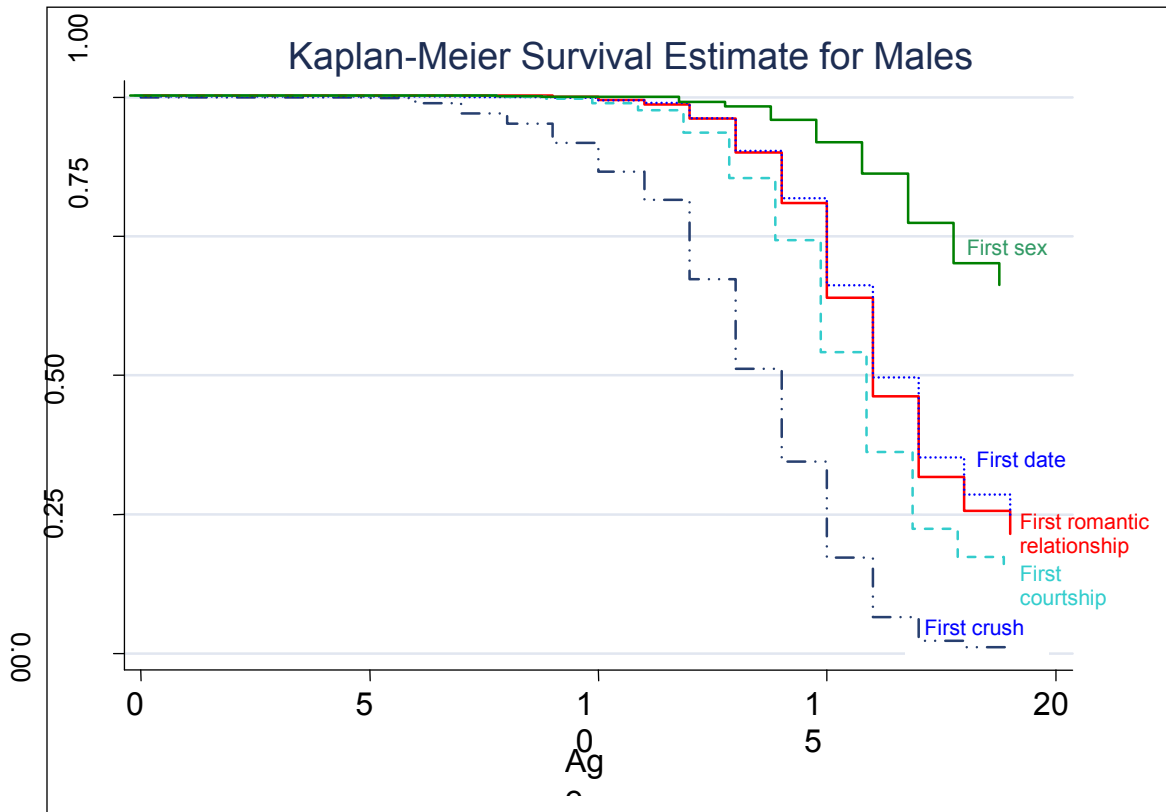
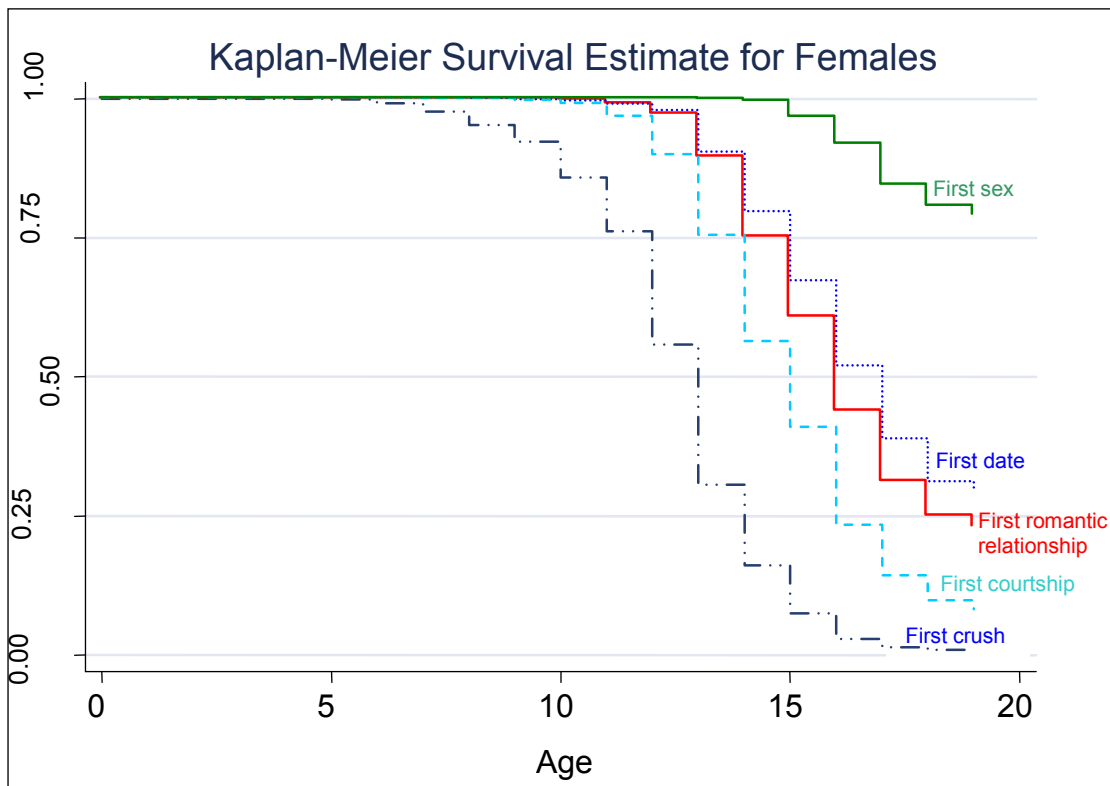


Figure 2



Emotional Relationships Scale

The adolescents were asked at what age they had their first crush, their first courtship, their first date, and their first romantic relationship. An emotional relationships scale was constructed based on their responses. Data from 2002 (as opposed to 1998) are used for this analysis because the adolescents experienced more of the emotional relationships by then and the data are more complete. The data indicate that 88% of boys and 84% of girls have started to experience emotional relationships in a particular pattern; they are experiencing crushes, courting, romantic relationships, and dating in that order (see Table 3). Almost 12% of boys and 16% of girls have experienced skipped patterns, that is, emotional relationships in another order. Many have not experienced all of the emotional relationships stages yet, but a clear pattern is still apparent. More boys than girls have experienced no emotional relationships or only a crush so far. Also, girls tended to skip patterns in their emotional relationships more than boys. Overall, the pattern for boys and girls is significantly different ($p \leq 0.001$).

The scale was also constructed another way to assess the results if age data were not available. When age is not considered, and the order is assumed based on the proportion of adolescents who reported experiencing each behavior, the proportion of adolescents experiencing skipped patterns is lower. Without survey data on the ages that the adolescents experienced each emotional relationship, it would have appeared that only 3% of boys and 5% of girls experienced them out of order (data not shown). This difference in totals is due mainly because a large proportion of adolescents experienced dating before their first romantic relationships.

Table 3. Emotional Relationships Scale (based on reported ages) by Sex, 2002

Behavior	Males	Females
No emotional relationships	1.10	0.83
Crush only	13.96	7.90
Crush + Courting	5.97	10.50
Crush + Courting + Romantic Relationship	6.43	10.08
Crush + Courting + Romantic Relationship + Dating	60.88	54.99
Skipped patterns	11.66	15.70
Total	100.00	100.00

n=2,051

Many of the adolescents have experienced several of these emotional relationships in a single year. To assess the tempo of going through these stages, a three-level variable was created to indicate the pace of emotional relationships. The adolescents who experienced 0-2 emotional relationships were coded as 0, the adolescents who experienced 3 or 4 emotional relationships over multiple years were coded as 1, and the adolescents who experienced 3 or 4 emotional relationships all within the same year were coded as 2 and considered moving through relationships quickly (see Table 4). Similar proportions of males and females experienced 0-2

emotional relationships and among those who experienced 3-4 emotional relationships, males were more likely to experience them quickly. Over 49% of boys and 32% of the girls were considered to be experiencing the relationships quickly. Overall, the tempo of boys' relationships are significantly different from that of girls' relationships ($p \leq 0.001$).

	Males	Females
Experienced only 0-2 emotional relationships	23.14	20.79
Experienced 3-4 emotional relationships slowly	27.64	46.78
Experienced 3-4 emotional relationships quickly (within one year)	49.22	32.43

n=2,051

Physical Behaviors

A 4-item physical scale was developed to assess the order of physical behaviors. It included handholding, kissing, petting, and sexual intercourse. This scale was created using a different method than the emotional relationships scale because age data for physical behaviors are not available. The scale was created based on assumptions that were made from prevalence data. For example, if an adolescent said he or she experienced handholding, kissing, and petting, it was assumed that they did so in that order. If an adolescent experienced handholding and petting only, without kissing, he or she would be considered experiencing skipped patterns.

An assessment of the patterns of physical behaviors shows that the majority of the adolescents follow a progressive pattern (See Table 5). About 3% of boys and less than 1% of girls experienced skipped patterns in physical relationships. These percentages would probably be higher if data were available on the age at which each physical behavior was experienced. Nevertheless, when compared with the skipped patterns observed in emotional relationships, when age data was not taken into account (3% for boys and 5% for girls), the pattern in physical behaviors is more consistent than observed in emotional relationships, especially for girls.

Overall, the pattern of boys' physical behaviors are significantly different from that of girls' relationships ($p \leq 0.001$). Males are represented more on the experienced end of the scale while girls are represented more at the inexperienced end of the scale. Boys also seem to engage in skipped physical behaviors more than girls. This contrasts with emotional relationships, in which girls engage in skipped patterns more than boys.

Table 5. Physical Behaviors Scale (based on prevalence of each behavior), 2002

Behavior	% of males	% of females
No physical behaviors	10.56	12.06
Holding Hands only	15.43	22.14
Holding Hands + Kissing	19.38	32.12
Holding Hands + Kissing + Petting	22.41	13.41
Holding Hands + Kissing + Petting + Sexual Intercourse	29.66	19.54
Skipped patterns	2.57	0.73
Total	100.00	100.00

n=2,051

III. Characteristics Associated With Having Sex

Bivariate analysis

To assess the factors that influence the probability of having sex, bivariate analysis was conducted. The results show that males, adolescents with less wealth, those living in urban areas, those not enrolled in school, those who go to church fewer than 3 times per month, and those who progressed quickly through emotional relationships are significantly more likely to have had sex (see Table 6). The 14% of adolescents experiencing emotional relationships out of order or in skipped patterns were not significantly more likely to have had sex.

Table 6. Proportion of adolescents who have had sex in 2002, by demographic characteristics

	% who have had sex	P
Male	30.76	<0.001
Female	19.54	
Less wealth	28.27	0.008
More wealth	23.15	
Urban	26.76	0.027
Rural	21.89	
Enrolled in school	15.24	<0.001
Not enrolled	31.55	
Goes to church once or twice a month or less	30.87	<0.001
Goes to church 3 times per month or more	19.80	
Emotional relationships in order	26.06	NS
Emotional relationships out of order	21.94	
Few emotional relationships (0-2)	2.65	<0.001
Slow pace of emotional relationships (3-4)	25.70	
Fast pace of emotional relationships (3-4)	37.50	

n=2,051

NS=Not significant

Multivariate Survival Analysis

The effect of experiencing emotional relationships quickly on the age at first sex was examined among boys and girls separately. After confirming that the proportionality assumption was met using Kaplan Meier plots, hazards models were run to assess the factors associated with the risk of having sex by a given age. Age at first sex was modeled using Cox proportional hazards.

In Table 7, Model 1 shows the unadjusted association between the pace of emotional relationships and age at first sex, among boys and girls separately. The middle category, slow pace of 3-4 emotional relationships was the comparison group. In the bivariate relationship among males, those who experienced few emotional relationships are significantly less likely to have sex at a younger age compared with those who have experienced 3-4 emotional relationships slowly. The third category, fast pace of emotional relationships was not significant in the model. Therefore, whether a boy experiences the 3-4 emotional relationships slowly or

quickly, does not influence his risk of having sex at a younger age; however, boys who have experienced only 0-2 emotional relationships are less likely to have had sex by age 19 than those who have experienced more. When socio-demographic variables are added to the model (Model 2), the strength and magnitude of the association remains. In addition, rural residence (HR=0.61, $p \leq 0.001$) and high education (HR=0.94, $p \leq 0.001$) are inversely and significantly associated with age at first sex.

Among females the association between pace of emotional relationships and age at first sex is also significant. Model 1 shows that girls who experience emotional relationships quickly are at significantly increased risk of having sex at a younger age (HR=1.85, $p \leq 0.001$). A hazard ratio for the lowest category that includes girls who experienced only 0-2 relationships was 0 because none of the girls who had few emotional relationships reported ever having had sex. When additional variables are added to the model, the association between fast pace of emotional relationships and age at first sex is somewhat attenuated but remains statistically significant (HR=1.48, $p=0.009$). Model 2 shows that girls who go to church frequently (HR=0.62, $p \leq 0.001$) and have high education (HR=0.82, $p \leq 0.001$) are at lower risk of having sex by age 19. Unlike for boys, rural residence is not significantly associated with risk of sex among girls.

	Boys n=1089				Girls n=962			
	Model 1		Model 2		Model 1		Model 2	
	Hazards Ratio	95% CI	Hazards Ratio	95% CI	Hazards Ratio	95% CI	Hazards Ratio	95% CI
Few emotional relationships (0-2)	0.12***	0.07	0.22	0.22	0 ^a	---	0 ^a	---
Fast paced relationships (3-4)	1.17	0.93	1.48	1.46	1.85***	1.39	1.48**	1.10
Rural				0.80			0.82	0.59
Frequent church attendance				1.10			0.62***	0.46
Highest Grade				0.97			0.82***	0.79

***P ≤0.001; **P ≤0.01; *P ≤0.05; † P ≤0.10

^a Cell size was too small to calculate standard errors

Discussion

One of the primary aims of the present study was to explore the gender differences in precoital behavior. This study found significant differences between adolescent boys and girls. As in other developing countries, male adolescents in the Philippines engage in each emotional relationship and in sexual intercourse at earlier ages than females do. They also progress through these stages at a faster pace than females do. The current analysis finds that girls who move quickly through emotional relationships are at a significantly higher risk of having sex at a younger age, which also provides an important cue for intervention. For boys, experiencing emotional relationships quickly does not increase their risk of having sex. Urban residence and limited education are stronger predictors of having sex at younger ages for boys. For girls, in addition to fast pace of emotional relationships, infrequent church attendance and fewer years of education raise their risk of having sex at younger ages.

The present study also examined the pattern of precoital behaviors. While other studies find that most adolescents proceed in their relationships in an ordered progression, many adolescents in the Philippines go “out of order.” Adolescents are experiencing physical activities in a more consistent pattern than they are experiencing emotional relationships, however. Based on data on the ages at which each adolescent experienced each emotional relationship, almost 12% of boys and 15% of girls experienced them in an order that was not expected. Looked at in another way based on prevalence data, 3% of boys and 5% of girls engaged in skipped patterns of emotional behaviors compared with only 3% of boys and less than 1% of girls who engaged in “skipped” patterns of physical behaviors.

Adolescents in the Philippines begin their physical relationships later than adolescents in other developing countries (Singh et al. 2000), and the trend is seen in this sample with only 31% of boys and 20% of girls ages 17 to 19 reporting ever having had sex. Their precoital behaviors, however, reveal important cues about their impending sexual activity. Most boys and girls have crushes early on, and a few years later they engage in courting, dating, and romantic relationships, all around the same time. It is not until a few years later that they engage in sexual intercourse. The emotional relationships are better spaced among females than among males. In the Philippines, this “pause” before sex, presents parents, schools, and adolescent health programs an opportunity to ensure that adolescents can make informed choices about sexual intercourse. There is more lead time to provide adolescents with the information and the access to contraception which help ensure that they are making safe and informed decisions about their sexual behavior.

One of the primary pitfalls of the current research is that all data come from adolescent self-reports, and may be subject to recall bias or social desirability bias. Due to the strong conservative culture in the Philippines, the self-reported data may not reflect true behavior. Many adolescents, particularly females, may be especially uncomfortable discussing their sexual behavior and, thus, their reports may be inaccurate. Young men, on the other hand, may over report their sexual experiences, to give the impression that they are conforming to societal expectations (Gregson et al. 2002; Singh et al. 2000).

Because the adolescents have been involved in this longitudinal survey for almost two decades, the interviewers have established strong rapport with the participants, however. While the respondents may be embarrassed to report their sexual behaviors to someone they know well, the interviewers have been trained to reassure the adolescents repeatedly over the years that their responses will be kept confidential. Further, the data in the present study can be externally validated with the results from other of among Filipino adolescents. YAFS data collected in 2002 found that much lower a much lower proportion—12% of adolescents ages 15 to 19—reporting ever having had sex, compared with 26% of adolescents ages 17 to 19 found in the present study (Commission on Population and United Nations Population Fund 2003).

This study has several important strengths. The CLHNS provides a unique opportunity to consider relationship progression from both a physical and emotional perspective. Rarely do studies consider the behaviors of adolescents before first sex, much less the emotional relationships. In addition, unlike earlier studies, this study considers the tempo of emotional relationships. Also, many other studies of sexual behavior among adolescents have been done in schools, which exclude young people who are out-of-school, who stay at home or go to work, and may be more likely to engage in high-risk behaviors. This study is representative of all adolescents in Cebu since there were no selection criteria, other than losses to follow up, and therefore the results of the study are probably applicable to other major urban areas in the Philippines.

Currently several governmental and nongovernmental initiatives in the Philippines address the reproductive health needs of adolescents; unfortunately, they face many challenges. The largest is addressing the lack of high-level political support for contraception in general and even more so for family planning information and service delivery to adolescents (Human Rights Watch 2004). Cultural stigma against unmarried youth using contraceptives, negative attitudes among health care providers, pressure from the Church and lack of adequate supplies at the local health system level all contribute barriers to adolescent sexual and reproductive health (Varga and Zosa-Feranil 2003).

Programs should reflect the reality of adolescent sexual behavior, however. Based on these findings adolescents indeed are on the course of engaging in sexual behaviors and have immediate reproductive health needs. Boys are sexually active earlier than girls. Girls space their emotional relationships more than boys do, but girls who do progress through them quickly are at significantly greater risk of having sex. Programs should understand the unique needs of males and females and tailor interventions that address them in different ways. Parents should ensure that their male children are prepared for sexual activity at earlier ages. Girls who move quickly through different emotional relationships need to be equipped with the information and access to services to enable them to have safer sex.

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