

## Filipino Adolescents' Sexual Attitudes and Behaviors: Results from a University Cohort

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### Abstract

*This research describes the sexual attitudes and behaviors of a cohort of adolescents, 15–24 years old, attending a large state university in Manila, Philippines (N = 1,412). Results revealed high percentages for both male and female adolescents who still value virginity, and disclosed disagreement with premarital sex (PMS), multiple sex, casual sex, pornography, cohabitation, same-sex relationship, petting and female masturbation. However, male masturbation, necking, and holding hands and kissing were found to be acceptable. Results likewise indicated an increase in adolescents who engaged in PMS over time, although generally low (27.7%) compared to the findings of other studies. Of those who have engaged in PMS, 80% did not use condom, which puts the adolescents into risks of unplanned pregnancy and exposure to STIs or HIV. The study also examined the correlates and predictors of sexual behaviors of a cohort of students. Fourteen variables served as independent/predictive factors in the analyses. The dependent variable was their scores on self-report sexual behaviors measured on a Likert Scale. Six of the predictive factors (gender, sexual preference, age, school allowance, monthly family income, and attitude towards sex) were significantly correlated with sexual behavior. Stepwise regression analyses identified only four factors - attitude towards sex, monthly family income, gender, and sexual preference - as significant predictors of sexual behaviors. This composite term explains 16.1% of the total variance, with the overall equation significant at  $p < .001$ . Implications for adolescent sexuality and reproductive health programs and future research were noted.*

**Keywords:** Filipino adolescents, adolescent sexuality, sexual attitudes, sexual behaviors, premarital sex, sex education

### 1. Introduction

Adolescence is a stage in life in which sexual behaviors are developing and becoming established (Bayley, 2003). During this stage both sexual ideation and engagement in a spectrum of sexual behavior increase (Crockett, Raffaelli & Moilanen, 2003) such as talking about sex, sexual intimacy, solitary masturbation, oral sex, and sexual intercourse (Chi, Yu & Winter, 2012). Reviews of recent scientific literature have revealed profound changes over the past decades in sexual behavior of adolescents, college students, and other young adults (Langer, Warheit & McDonald, 2001; Irala, Osorio, Del Burgo, Belen, De Guzman, Calatrava & Torralba, 2009; Teva, Bermudez & Buela-Casal, 2009). These changes include the decline in the age of onset of sexual intercourse; increase in percentage of adolescents who reported casual sex, multiple sex partners, and oral sex; and high rates of unprotected sexual activity both for males and females (Aras, Semih, Gunay, Orcim & Ozan, 2007; Chi, et al, 2012; Irala, et al, 2009; Ryu, Kim & Kwon, 2007; Teva et al, 2009).

This increasing sexual involvement posed alarming consequences. In particular, premarital sex (PMS) has significant impact on public health concerns. Despite efforts by competent authorities to increase awareness and education, the age of initial sexual contact among adolescents remains very low while unplanned pregnancies and exposure to sexually transmitted infections (STIs) is still high (Irala, et al., 2009). While these issues have long been recognized in many developed countries, there is still a dearth of literature and empirical data in different Filipino communities.

In the Philippines, the cases of HIV are relatively low but slowly increasing. As of January 2013, there were 380 new HIV Ab seropositive cases which was 79% higher than the 212 cases registered in January 2012; the 20 to 29 years old had the most number of cases, 61%, which is higher than the 59% in previous year (National Epidemiology Center, Department of Health, 2013). The vulnerability of adolescents to HIV and other STIs have also increased due to behavioral factors such as initiating sexual relations at a young age and having multiple (concurrent or serial) sexual partner (Irala, et. al, 2009).

The nationwide Young Adult Fertility and Sexuality Study among youth aged 15-24 (YAFS3, 2002) revealed that 23.2% adolescents have had engaged in premarital sex (PMS) (31% males and 16% females), with mean age at first sex

of 17 for males and 18 for females. Only 27.6% males and 14.5% females used contraception during first PMS. Females (90%) usually had PMS with a boyfriend. Majority among males, 60%, also had their first PMS with a girlfriend, while about 32% had it with a friend or acquaintance. Of the sexually active adolescents 50% males while 9.1% females reported having more than one PMS partners, with 4 and 3 partners on the average, respectively. About four percent (4%) males have received payment for sex and 6.4% have paid for it.

Prior to YAFS 3, Sandoval, Mangahas, and Guerrero (1998) also conducted a nationwide survey on the situation of the Filipino Youth, which revealed serious problems in the areas of criminality, gambling and sexuality. An estimated 6% youths claimed to have ever sold illegal drugs; 7% claimed to have used them; 18% watched pornographic movies; 13% have ever had a premarital sexual relation; and 5% have ever engaged in sex that they paid for, while the same proportion have engaged in sex and been paid for it. Eight percent (8%) Filipino youths had sex against their own will; and 4% have ever forced someone to have sex with them.

Lee (1997) looked into the sexual lifestyle, dating activity, and sexual behavior, role of peer groups and families, and perceptions of pregnancies and STD infections and preventive methods, of adolescents in five universities. The salient findings indicated that unmarried adolescents have dating and heterosexual relationships in varying context in which physical intimacies, including penile-vaginal penetration, appear to be part and parcel of these relationships. Young people were perceived to experience unwanted pregnancies more than they experienced STD infections. Despite these, teenagers generally do not have adequate access to pertinent activities and services in the campus. Given the complexity and dynamic nature of adolescents, it is helpful to keep on updating and identifying research gaps and challenges in understanding the Filipino adolescents (Cabigon, 1999) particularly on the aspect of their sexuality.

The current study produced baseline information about sexual attitudes and behaviors of undergraduate students enrolled at the Polytechnic University of the Philippines, the largest university of the country with more than 70,000 students, during the academic year 2012-2013. The cohort's personal and family characteristics, their attitude towards sex, and how they are correlated with sexual behavior were examined. The paper hopes to provide data about the college students' views on sex as well as their actual sexual practices or involvements, which can be utilized in the planning and implementation of educational policies, and in espousing development programs that address the needs of the students, particularly in the sexuality and reproductive health domains.

## 2. Method

This is a descriptive survey participated by 1,412 undergraduate students enrolled in various courses in the largest state university in the country (in terms of student population) located in an urban center in Manila. Respondents came from 15 colleges which were all based on five Manila campuses. The survey was conducted during the second semester of SY 2012-2013. Permission to administer the questionnaires was obtained from the Office of the Vice President for Research, Extension, Planning and Development.

Two sampling techniques were employed in the study. The first was cluster random sampling where the researcher selected the classes to be included in the study. The second phase involved inviting the students in the selected classes to participate in the study, on a voluntary basis. The nature and purpose of the study were explained to the students and their verbal consent was obtained. Confidentiality was assured as no student names or numbers were collected with the data. The participants were advised that they are free to withdraw at any point without jeopardy on their grades or academic status.

The instrument was written in English language, which is a language of instruction in the University. It consists of the following parts: (1) the adolescents' personal characteristics [gender, sexual preference, age, year level, marital status, employment while studying, and school allowance] and family characteristics [father's educational attainment, mother's educational attainment, family income, number of siblings, birth order, parents' living arrangement, and whether the adolescent lives/stays with both or any of the parents]; (2) 15-item Sexual Attitude Scale; and (3) 15-item Sexual Behavior Inventory.

A modified Likert Scale was used for both the sexual attitude and sexual behavior. To facilitate interpretation, the theoretically relevant variables were all coded so that higher scores reflect more positive attitude and signify more liberal sexual practices. Responses to the sexual attitude items ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). A five-point response format was also employed for each of the sexual behavior indicators: 1 (*No, I have not done it, and will never do it*); 2 (*No I have not done it, but I am open to doing it*); 3 (*Yes, I have done it only once*); 4 (*Yes, I have done it a few number of times*); 5 (*Yes, I have done it frequently/many times*).

The instrument was self-administering and contains instructions for responding. However, verbal instruction was

also provided during the actual survey. A team of senior psychology students enrolled in their Research I course assisted during the gathering and tabulation of data. Data were analyzed using statistical software. Frequency and percentage were calculated to draw a descriptive profile on the personal and family characteristics, the sexual attitude, and the sexual behavior of a Filipino university student. Bivariate analyses were used to examine association between sexual behavior and the personal and family characteristics of the respondents. Point-biserial correlation was conducted to determine the correlation between a dichotomous variable (e.g., gender, with female coded as 2 and male coded as 1; living arrangement, living with parent/s was coded 2 while not living with parent/s was coded 1) and the total score in sexual behavior. The Pearson Product Moment Correlation was employed for non-dichotomous variables. The variables that flagged a significant correlation were used in the subsequent stepwise regression analysis to identify which factor or composite factors contributed to the total scores on sexual behavior.

### 3. Results

#### 3.1 Descriptive Analyses

##### 3.1.1 Personal and Family Characteristics

Table 1 describes the personal characteristics of the respondent adolescents. Of the 1,412 students, 58.9% are females and 40.9% are males. In terms of sexual preference, a great majority, 84.3%, declared that they are heterosexuals; 1.6% exclusively prefer same-sex partners, and 6.3% are bisexuals. In terms of year level, 22.8% are in their first year, 40.5% are in second year, 24.6% are in third year, and 9.4% are in their fourth or fifth year in college. Mean age of 18.2 approximates the median age of 18 years old. The majority or 52.2% are 17 to 18 years old; 30.9% are 19 to 20 years old; 6.7% are aged 15 to 16 years old, while 4.4% are between 21 to 24 years old. The respondents are mostly single, 97.0%. Only 0.5% are married while 1.3% live with a partner. There are 15.9% work while studying, and the majority, 72.0%, are non-working or full time students. The percentage of students, 42.7%, who have a weekly school allowance of 500 to 1,000 pesos is significantly higher than any other subgroups. A US dollar is equivalent to an approximately 45 Philippine pesos at the time of study. There are 19.9% who are in the lowest school allowance subgroup of 500 pesos and below; 11.2% have 1,000 to 1,500 pesos per week; and 4.5% have 1,500 to 2,000 pesos. Very few (0.6% to 1.6%) have weekly school allowance between 2,000 to 10,000 pesos.

Table 2 reveals that majority of the adolescents' fathers (42.1%) and mothers (44.6%) are college graduates, followed by 38.9% and 37.0% who have only finished high school, respectively. In terms of total household monthly income, the biggest subgroup is 10,000 to 20,000 pesos with a percentage of 25.7%, followed by 21.7% whose family monthly income is below 10,000 pesos; 18.5% have 20,000 to 30,000 pesos; and 15.7% have 30,000 to 50,000 pesos. The rest of the adolescents are distributed in the three upper subgroups: 50,000 - 80,000, 8.1%; 80,000 - 100,000, 5.9%; and 100,000 - 200,000, 2.5%.

More than half of the respondents (67.3%) have 1 to 3 siblings; 18.8% have 4-5 siblings. Nearly half of the respondents, 42.7%, are middle born; 37.3% are first born or only child; 13.6% are last born. In terms of parents' living arrangement, 67.8% of the parents live together, while 31.0% live in separate places or residences. Majority of the respondents, 62.3%, are living/staying with either one or both parents, while 36.3% do not.

##### 3.1.2 Sexual Attitude

Table 3 shows the respondents' degree of agreement on the fifteen-item questionnaire that measures their attitude towards some aspects of sexuality. The adolescents demonstrated agreement on four items. More than half, 56.7%, strongly agreed that sex is sacred and should only be enjoyed by married couple (mean = 4.15). There are 47.6% who strongly believe that a woman should be a virgin at the time of her marriage (mean = 3.97). Likewise, 36.1% are strongly convinced that a man should also be a virgin at the time of his marriage (mean = 3.73). Virginitiy in this study refers to not having engaged in sexual intercourse. Nearly half of the respondents, 43.6%, agreed that holding hands and hugging in public is acceptable (mean = 3.71). The adolescent cohort disagreed (48.8%, mean = 2.12) with multiple sex partners. The rest of the items registered a neutral attitude based on the mode and mean statistics.

However, when the percentages of the 'strongly agree' and 'agree' responses were combined, as well as the percentages of those who 'strongly disagree' and 'disagree' on an item, the data suggest significant results. For instance, positive attitude was revealed in the following items: male masturbation (45.8%); necking (40.8%); and kissing in public

(27.8%). Although 36.9% favors premarital sex, a slightly higher percentage (37.4%) disclosed disapproval.

Furthermore, the adolescents who revealed negative attitude outnumbered those who indicated positive attitude on the following items: viewing/reading pornography through internet or other media (47.8%); cohabitation (45.2%); expressing one's sexual feelings with a partner (41.8%); same-sex sexual relationship (41.6%); petting (45.1%); and female masturbation (38.9%).

### 3.1.3 Sexual Behavior

Table 4 discloses the adolescents' self-report on their sexual experiences. Using mode as the central tendency measure, it could be said that this university cohort is generally inexperienced when it comes to most indicators of sexual behavior. When the percentages of those who reported having experienced it *at least once*, *few*, and *many times* were again combined, data suggest that significant number have had the following experiences: having an intimate partner (48.1%); watching/reading pornographic videos/materials (44.2%); intimate kissing (42.8%); masturbation (39.7%); necking (39.5%); petting (31.7%); petting in a generally public but dark and secluded place (30.8%); oral sex (26.3%); premarital sex with person they like and intend to marry (27.7%); and, premarital sex with someone they like but do not intend to marry (25.9%). Few have reported having engaged in casual or "one-night stand" sex (19.2%), sex with person of the same-sex (14.2%), paying for sex (14.2%), and being paid for sex (11.1%). One important finding is in the use of condoms or pills during sexual intercourse. Of the 365 respondents who have had experienced PMS, 80.2% of them engaged in unprotected sex.

### 3.2 Correlation Analyses

The results of the correlation analyses are reported in Table 4. As shown, four of the individual factors were found to be significantly correlated with scores on sexual behaviors. These were: gender (male),  $r = .244, p < .000$ ; sexual preference (bisexual),  $r = .119, p < .000$ ; age (older),  $r = .075, p .006$ ; school allowance (higher),  $r = .123, p < .000$ ; and sexual attitude (positive),  $r = .308, p < .000$ . Year level and working while studying were not significantly correlated with sexual behavior. Marital status was excluded from the analyses since very little variation was observed among the respondents (97% are single). In terms of family factors, only the total monthly household income was significantly correlated with sexual behavior,  $r = .205, p < .000$ . No significant relationship was observed between the adolescents' sexual behavior and the rest of the family factors, namely, father's educational attainment, mother's educational attainment, number of siblings, birth order, parents' living arrangement, and whether the adolescent is living or staying with his/her parent/s.

### 3.3 Regression Analysis

Step-wise regression analysis was conducted to determine which factors or composite factors provided the most powerful predictors of sexual behaviors. Only the factors found to be significant in the correlation analyses were included in the subsequent regression equations. The outcomes from the step-wise regression are presented in Table 6. Only sexual attitude, gender, sexual preference, and monthly family income were found to be significant predictors of the adolescents' sexual behavior. Age and school allowance were not significant and were excluded in the model. As shown in the Table, sexual attitude was entered first and accounted for 7.5% of the total explained variance. In the second equation, monthly family income was added to sexual attitude and accounted for 11.9% of the total explained variance. In the third equation, Gender was added to both sexual attitude and monthly family income, which accounted for 15.3% of the total explained variance. Sexual preference entered last and increased the explained variance by 16.1%. The  $R^2$  score changes occasioned by adding each of the terms were significant, and the overall equation was also highly significant at  $p < .001$ .

## 4. Discussion

### 4.1 Sexual Attitude

Data revealed that Filipino adolescents still hold conservative attitude towards sex. Specifically, this was evidenced in the belief that sex is sacred and should only be enjoyed by married couples. More than half (56.7%) strongly agreed that sex is sacred and should only be enjoyed by married couple. The same conventional attitude was observed in the aspect of

virginity. There are more adolescents who believe that a woman as much as a man should be a virgin at the time of her marriage. Furthermore, higher percentage also reported disagreement on the following: premarital sex, multiple sex, casual sex, pornography, cohabitation, same-sex relationship, petting, and female masturbation. These findings reflect the generally traditional cultural mores about premarital and non-marital sexual activity. This conservative attitude may be influenced by strong religious beliefs and deep-rooted cultural values. As a predominantly Christian country, the Philippines considers sex between married couples as morally and legally acceptable. The Catholic Church remains influential in legal, political and religious views on sexuality, contraception, including how sex education should be taught in school. Premarital sex, pornography, prostitution, nudity, cohabitation and similar variants are still considered illegal and taboo.

Male masturbation, necking, and holding hands and kissing were found to be acceptable to a certain degree. The Church prohibits masturbation as sinful and unnatural but this religious proscription has begun to loosen up with male sexual exploits provided by an abundance of social opportunities (e.g., birthdays and community celebrations, public dances, fraternities) (Leyson, 1991), and exposure to various forms of media (e.g. romantic teen television programs, showbiz personalities, internet), which generally encourage sensual and erotic activities. Furthermore, adolescents are faced with social and biological pressures to engage in sexual activities, and may find it difficult to match what they practice with what they believe to be desirable (Adaji, Warenius, Ong'any & Faxelid, 2010). This situation is specifically prevalent among adolescents with friends who are sexually active and view sex as a defining aspect of masculinity (Somers & Gleason, 2001).

#### 4.2 Sexual Behavior

There is an increase in the percentage of adolescents who engage in sexual behavior over time. Engagement in intimate relationships have increased from 21% females and 38.6% males (Cabigon, 1999) to 48.1% for both genders; and from 18% (Cabigon, 1999), 23.2% (YAFA 3, 2002) to 27.7% in the present study who have had experienced premarital sex. Despite this increase however, the figures reflected a generally low sexual behavior of this cohort of university students compared to the findings of other studies.

In the study of Nahom et al (2001) involving early adolescents of an urban district in the Pacific Northwest, the percentage of teens who have engaged in sexual intercourse (vaginal or anal) increased across grades: 18% among 8<sup>th</sup> graders; 30% among 9<sup>th</sup> graders; 43% among 10<sup>th</sup> graders. In Spain, Teva et al (2009) reported that 37% males while 9.5% females had sex with a casual partner; 52.1% males and 46% females in the age group between 15 and 16 years have oral sex once or more a month; 91.1% males and 87.6% females between ages 15 and 19 years used condom in their first sexual intercourse. The mean age at the onset of sexual intercourse was 14.8 for males and 15 for females.

A study of 1,048 Asian-American adolescents, Hahm, Lahiff and Barreto (2006) found that 24% women and 20% men reported having sexual intercourse. Foreign-born adolescents who spoke English at home had the highest rates of sexual intercourse for both women (37%) and men (34%). But for most acculturated group, a much higher proportion of female than male U.S.-born adolescents who spoke English reported having had sexual intercourse (31% and 18%, respectively). In a more recent study involving students of a Canadian university, Dalton and Galambos (2009) stated that penetrative sex (sex in which the penis penetrates the vagina or anus) was experienced by 31% respondents, and 38% have received oral sexual contact from a partner, both in at least one month during the first year in college.

In Jamaica, 64% males but only 6% females reported having engaged in premarital sex. However, mean age at first sex for both gender is considerably low at 11.3 years old for girls and 9.4 for boys (Eggleston et al., 2007). In Turkey, masturbation was high at 51.3% (82.5% males and 14.5% females), sexual intercourse with intimate girlfriend/boyfriend (42.6%), casual sex (28.9%), sex with paid sex worker (28.5%), and multiple or more than two sex partners (54.5%). The median age at first sexual intercourse is 16 (11-18 range) for males, and 17 (14-18 range) for females (Aras, et al, 2007). Nwankwo and Nwoke (2009) reported that 47.4% of Nigerian student cohort from nine schools/colleges have ever had sex; in the last six months, 63.2% have had sex more than four times, more than three times, 11.3% one to two times, and 3.4% more than 5 times; 43.9% of them are with multiple or more than three partners while 42.7% are with single partner; and 53.6% have tried having sex with an unknown partner.

The present findings, however, indicated higher percentage of engagement in some sexual activities among the Filipino adolescent cohort compared to their Asian counterpart. An investigation on the prevalence and correlates of sexual behaviors among university students in China showed that: 10.8% of students are engaged in oral sex; 12.6% had heterosexual intercourse; 2.7% had same-sex sexual activities. However, higher proportion of Chinese students had experienced masturbation (46%) and more than half (57.4%) viewed pornography (Chi et al, 2012). Among Korean

adolescents, the study of Ryu, et al. (2007) indicated that 14.4% of high school students had experience sexual intercourse; 6.8% of those who reported having had sexual intercourse have no girl-/boyfriend, suggesting casual sex experiences.

These variations in the proportion of adolescents who were engaged in various sexual practices may be explained by differences in cultural and social context. One alarming finding is in the use of condoms or pills during sexual intercourse; 80% of those who have experienced sexual intercourse also reported that they did not use or does not like using condom, which puts the adolescents into high risk of unplanned pregnancy and exposure to STIs or HIV.

#### 4.3 Correlation Analyses

The relationships between individual and family factors and the scores on sexual behaviors were consistent with some of those reported in the literature, and inconsistent with others. This study found out that although adolescents may hold different values concerning sexuality, their attitude about sex are related to behavior. Sexual experience increased with more positive attitudes towards sexuality (Huerta-Malacara, 1999; Werner-Wilson, 1998). Moreover, investigations into the effects of human sexuality generally support the assertion that sexual experience has a reciprocal relationship with sexual attitudes (Eggleston et al, 1999; Tobin, 2011). Greater average positive affect was associated with oral sex, and permissive attitudes toward sex were associated with more positive affect in relation to experience of penetrative sex (Dalton & Galambos, 2009).

The positive correlation between the respondents' sexual preference and sexual behavior suggests that adolescents with bisexual orientation tend to engage in sexual behavior higher than the homosexuals, while both genders have more liberal sexual practice than the heterosexuals. There is a dearth of investigation on this area as most of the studies specifically focus on a particular group of sexual orientation [i.e., bisexual and homosexual risk behaviors (Matteson, 1997; Rosario, Meyer-Bahlburg, Hunter & Gwadz, 1999; Rew, Whittaker, Taylor-Seehafer & Smith, 2005)]. Available literature comparing heterosexuals, homosexuals and bisexuals were focused on patterns of sexual arousal and sexual attraction (Cerny & Janssen, 2011; Lippa, 2007).

The significant correlation between age and sexual behavior supported the findings of Huerta-Malacara (1999), Langer, et al (2001), Hahm, et al. (2006), Aras, et al (2007), Mustanski (2008) and Teva (2009) but was contrary to what was reported in Chi, et al. (2012) and Akinwande and Brieger (2007). These discrepancies may be due to different samples, methods, and modes of analyses used by investigators, aside from the fact that these studies were conducted in different temporal and cultural context.

The relationship between gender and sexual behavior indicated higher sexual permissiveness and activity among males than females provided support to Werner-Wilson (1998), Langer (2001), Hahm, et al (2006), Akinwande and Brieger (2007), and Chi (2012). Adolescent males are much more likely than adolescent females to engage in sexual activities. Furthermore, the significant correlation between total monthly household income and sexual behavior among adolescents was consistent with Aras et al. (2007) who also found that mean household income were higher for sexually experienced males, (Aras, et al., 2007).

#### 4.4 Regression Analyses

Statistical analyses were conducted separately and simultaneously for individual and family characteristics because they are both theoretically relevant and have been identified as important predictors of sexual attitudes [and behavior] (Werner-Wilson, 1998). The findings from the regression analyses indicated that the combined factors (sexual attitude, gender, sexual preference, and total monthly family income) in the final equation were powerful predictors of sexual behavior. These data are quite informative and contributed to the understanding of Filipino university adolescents. In the case of university adolescents, it could be assumed that they already possess the assets and resources that will allow them to maximize the benefits of sexuality, minimize the risks and mitigate any negative consequences that may arise (Dalton & Galambos, 2008). The important role of the school administrators, guidance and counseling centers, and relevant units in the university is to provide appropriate sexual education programs that will address the sexual issues and promote healthy sexual development among students. The challenge is to balance the demands of the social mores and the reality. Adolescent sex education should first and foremost strongly advocate abstinence, while at the same time providing comprehensive and informed knowledge on reproductive health, condom and contraception use, and the negative consequences of risk behavior (e.g. unwanted pregnancy, STIs, HIV, etc.) that will help foster a safe, healthy, and responsible sexual behavior among young people.

The findings of this study indicated that several of the factors were not always significantly correlated with sexual behavior and/or they were not significantly correlated with sexual practices. This does not mean, however, that they should no longer be considered when designing future sex education programs or interventions, since research with other samples might alter the findings reported in this paper. This study, like the others, is not without limitations. First, the data are based on self-report of the respondents and the use of questionnaire may only have evaluated their sexual attitudes and behaviors without further exploration of the motivations and influences behind the attitudes and behaviors. However, questionnaire-based studies of this sort have been employed in several sexual and reproductive health surveys (Adaji, 2010; Aras, 2007; Chi, 2002; Eggleston, et al 1999; Langer, et al, 2001; Langstrom, 2004; Ryu, 2002; Teva et al, 2009). The study may not totally represent the views of all Filipino adolescents, since the sample was limited to only one university. Adolescents from other state or private universities, the out-of school youths, and those coming from various socio-economic status also maintain certain attitudes and may behave in a similar or different ways from the sample of this study.

Future studies may also focus on other factors that influence sexual behavior such as peer pressure to conform to sexual standards; and parent's influence on sexuality (i.e., parent-child communication parent) (Werner-Wilson, 1998; Somers & Gleason, 2001); and further examination of the multiple and distinct and simultaneous influences of individual and family factors, and gender differences on sexual attitudes and behavior to expand our understanding of Filipino adolescents. Furthermore, studies using qualitative methods may be helpful, particularly in identifying the subgroups that are most at-risk, and suggesting effective means of intervention.

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**Table 1.** Respondents' Personal Characteristics

Personal characteristics	Subgroups	%
Gender	Male	40.9
	Female	58.9
	No response	0.3
Sexual preference	Opposite sex only	84.3
	Same sex only	1.6
	Bisexual	6.3
	No response	7.8
Age	15 – 16	6.7
	17 – 18	52.2
	19 – 20	30.9
	21 – 24	4.4
	No response	5.8
Year Level	1 <sup>st</sup> year	22.8
	2 <sup>nd</sup> year	40.5
	3 <sup>rd</sup> year	24.6
	4 <sup>th</sup> year/5 <sup>th</sup> year	9.4
	No response	2.6
Marital status	Single	97.0
	Married	0.5
	Single but living with a partner	1.3
	No response	1.2
Employment	Working while studying	72.0
	Not employed	15.9
	No response	12.1
School allowance per week (in Philippine peso)	Below 500.00	19.9
	500 to 1,000.00	42.7
	1000.00 to 1500.00	11.2
	1500.00 to 2000.00	4.5
	2000.00 to 2500.00	1.6
	2500.00 to 3000.00	0.6
	3000.00 to 5000.00	0.9
	5000.00 to 10000.00	0.6
No response	18.0	

**Table 2.** Respondents' Family Characteristics

Family characteristics	Subgroups	%
Fathers' education	Elementary	7.6
	High School	38.9
	College	42.1
	Postgraduate	7.9
	No response	3.6
Mother's education	Elementary	6.7
	High School	37.0
	College	44.6
	Postgraduate	8.6
	No response	3.0
Total household monthly income (in Philippine peso)	Below 10,000.00	21.7
	10,000.00 to 20,000.00	25.7
	20,000.00 to 30,000.00	18.5
	30,000.00 to 50,000.00	15.7
	50,000.00 to 80,000.00	8.1
	80,000.00 to 100,000.00	5.9
	100,000.00 to 200,000.00	2.5
No response	1.9	
Number of siblings	None (only child)	2.3
	1 sibling	19.1
	2 siblings	27.8
	3 siblings	20.4
	4-5 siblings	18.8
	More than 5	5.5
	No response	6.2
Birth order	First born (and only child)	37.3
	Middle born	42.7
	Last born	13.6
	No response	6.4
Parents living arrangement	Parents live together	67.8
	Parents do not live together	31.0
	No response	1.2
Living arrangement	Living/staying with parents	62.3
	Not living/staying with parents	36.3
	No response	1.4

**Table 3.** Sexual Attitude

Item	Strongly agree	Agree	Neutral	Dis-agree	Strongly disagree	Mean	Verbal Description
1. Sex is sacred that only married couple should engage on it.	<b>56.7</b>	18.1	14.9	3.8	6.5	4.15	Agree
2. I do not find anything wrong with a man and a woman who kiss in public.	8.4	19.4	<b>36.8</b>	23.7	11.7	2.89	Neutral
3. It is alright for an unmarried couple to have sex as long as it is their own decision and that no one has been forced to do it.	13.4	23.5	<b>25.8</b>	18.1	19.3	2.94	Neutral
4. It is alright for a couple to hold hands and hug in public.	20.8	<b>43.6</b>	24.3	7.7	3.4	3.71	Agree
5. I believe that a woman should be a virgin at the time of her marriage.	<b>47.6</b>	20.2	20.0	5.8	6.4	3.97	Agree
6. I believe that a man should be a virgin at the time of his marriage.	<b>36.1</b>	21.1	29.5	6.4	6.9	3.73	Agree
7. It is alright for a couple to live together and make love without the benefit of marriage as it is their	8.9	18.0	<b>27.9</b>	25.7	19.5	2.71	Neutral

own free decision.							
8. I do not find anything wrong with enjoying pornography, e.g. pornographic movies, internet videos and sites, magazines, etc.	10.3	16.7	25.5	21.2	<b>26.6</b>	2.63	Neutral
9. I do not find anything wrong with having sex with more than one person (not at the same time) as I like/love the person I'm having sex with.	9.7	8.7	14.1	18.8	<b>48.8</b>	2.12	Disagree
10. Necking (caressing/touching body parts from head to shoulder) is acceptable between a couple.	8.8	32.0	<b>33.0</b>	15.5	10.7	3.13	Neutral
11. Petting (caressing/touching private body parts from breast/chest and down) is acceptable between a couple.	8.5	17.9	<b>28.6</b>	22.6	22.5	2.67	Neutral
12. There is nothing wrong with a male who masturbates.	17.7	28.1	<b>30.0</b>	13.2	11.0	3.28	Neutral
13. There is nothing wrong with a female who masturbates.	11.4	18.2	<b>31.5</b>	19.8	19.1	2.83	Neutral
14. Nowadays, teens have the right to express their sexual feelings with partners.	8.6	18.4	<b>31.4</b>	20.9	20.9	2.73	Neutral
15. Gays and lesbians have as much right as the heterosexuals to enjoy sex with the persons they choose as long as there is mutual consent.	11.4	16.3	<b>30.7</b>	17.1	24.5	2.73	Neutral

4.50–5.00 = Strongly agree; 3.50–4.49 = Agree; 2.50–3.49 = Neutral; 1.50–2.49 = Disagree; 1.00–1.49 = Strongly disagree

Table 4. Sexual Behavior

Item	Yes, I have done it many times	Yes, I have done it a few times	Yes, I have done it once.	No, But I am open to doing it	No. I will never do it.	Mean	Verbal Description
1. I have had an intimate partner/ boyfriend/girlfriend.	16.4	19.4	12.3	<b>27.3</b>	24.6	2.55	Yes, once.
2. I have intimately kissed my partner.	9.1	19.1	14.6	<b>32.1</b>	25.1	2.76	Yes, once.
3. I have engaged in mutual necking with my partner.	13.5	17.5	8.5	26.7	<b>33.9</b>	2.50	Yes, once
4. I have engaged in petting/touching of private parts with my partner.	13.4	11.9	6.4	24.3	<b>43.9</b>	2.27	No, but I'm open to it.
5. I have had premarital sex with the person whom I like/love and intend to marry.	12.8	9.8	5.1	20.4	<b>51.8</b>	2.11	No, but I'm open to it.
6. I have had sex with the person whom I like but I do not intend to marry.	12.8	7.4	5.7	13.0	<b>61.2</b>	1.98	No, but I'm open to it.
7. I have tried oral sex with my partner.	14.1	8.0	4.2	15.3	<b>58.4</b>	2.04	No, but I'm open to it
8. I have tried kissing and petting in a generally public, but dark, hidden, and rather secluded place (e.g. movie house, comfort room, classroom).	13.4	8.4	9.0	13.1	<b>56.2</b>	2.10	No, but I'm open to it
9. I use/have used some form of contraceptives (e.g. pills, condoms) when I engage in sexual intercourse with my partner. (n = 365)	9.7	6.7	3.5	<b>57.1</b>	23.1	2.23	No, but I'm open to it
10. I enjoy/ have enjoyed reading or watching pornographic materials/ videos.	14.0	18.8	11.4	12.6	<b>43.3</b>	2.48	No, but I'm open to it
11. I do/have had experienced self-masturbation.	16.5	17.1	6.1	9.7	<b>50.7</b>	2.39	No, but I'm open to it
12. I have had experienced casual or a "one-night-stand" sex.	8.7	4.7	5.8	12.2	<b>68.7</b>	1.72	No, but I'm open to it.

13. I have had engaged in a sexual activity with a person of the same sex.	8.8	2.8	2.6	6.3	<b>79.5</b>	1.55	No, but I'm open to it
14. I have tried paying to satisfy my sexual fantasies/urges.	8.5	2.8	2.9	9.5	<b>76.3</b>	1.58	No, but I'm open to it
15. I have tried receiving/accepting money or material things or have engaged in sexual activity in exchange of a seriously wanted favor.	8.0	1.3	1.8	4.8	<b>84.1</b>	1.00	No. I will never do it.

4.50–5.00 = Yes, many times  
3.50–4.49 = Yes, a few times

2.50–3.49 = Yes, but only once  
1.50–2.49 = No, but open to it

1.00–1.49 = No, I will never do it

**Table 5.** Correlation between Predictive Factors and Sexual Behavior

Predictive Factors	N	r	Sig
<b>Personal characteristics</b>			
1. Gender	1406	<b>-.244**</b>	.000
2. Sexual Preference	1301	<b>.119**</b>	.000
3. Age	1328	<b>.075**</b>	.006
4. Year Level	1373	.042	.116
5. Working while studying	1259	.019	.503
6. School allowance	1158	<b>.123**</b>	.000
7. Sexual attitude	1410	<b>.308**</b>	.000
<b>Family Characteristics</b>			
8. Father's educational attainment	1360	.003	.921
9. Mother's educational attainment	1367	.009	.728
10. Total household monthly income	1384	<b>.205**</b>	.000
11. Number of siblings	1323	-.011	.694
12. Birth order	1319	.001	.959
13. Parents' living arrangement	1393	-.033	.223
14. Living/staying with parents	1390	.015	.580

\*\* Correlation is significant at the  $p < .01$ .

**Note:** Gender and Sexual preference were categorical variables. For gender variable, male was coded 1, female was coded 2. For sexual preference variable, opposite sex was coded 1, same-sex was coded 2, bisexual was coded 3.

**Table 6.** Regression Analysis of Predictive Factors on Sexual Behavior Scores among the University Cohort

Independent Variable(s)	R <sup>2</sup>	R <sup>2</sup> change	Beta
Sexual attitude	.273	.075	.273
Sexual attitude Monthly family income	.345	.119	.236 .214
Sexual attitude Monthly family income Gender	.392	.153	.203 .209 -.188
Sexual attitude Monthly family income Gender Sexual preference	.401	.161	.197 .206 -.183 .088

**Note:** All R<sup>2</sup> changes are significant;  $F = 32.395$ ,  $p < .001$