The Family as Protective Factor against Sexual Risk-Taking Behavior among Filipino Adolescents¹

Maria Paz N. Marquez²

Introduction

Adolescence is a stage where impetuousness and feelings of invincibility take precedence over rational decision-making leading to heightened tendency for risk-taking and for sexual experimentation. Simultaneously, it is a period characterized by loosening parental control in response to the individual's transition from childhood to adulthood.

While the influence of peers or the "barkada" as well as exposure to the ever-growing powerful mass media can not be discounted, the prominent role the family plays in shaping the youth's behavior should not be completely overlooked. In the lives of young Filipinos, parental power remains to be the main influence and control despite competing authorities outside and within the family (Medina, 2001).

The family is the microworld of the Filipino and performs very important functions. It provides biological support, emotional security, protection and status to its members. Through its socialization function, the family plays an important role in the transmission of cultural values, beliefs, and customs, in the molding of the personality and character of its members, and in ensuring conformity to norms (Medina, 2001).

The Filipino family, however, has been undergoing dramatic changes in light of global modernization and worsening socioeconomic conditions. Widespread poverty continues to fuel overseas labor migration. As more and more Filipino parents opt to work abroad, surrogate- and long-distance parenting have increasingly becoming commonplace resulting to diminished parental supervision. It has been found that the venue for quite a number of sexual initiations among Filipino adolescents was the homes of either the girl or the boy (Raymundo and Lusterio, 1996) which could be a result of the growing number of unsupervised homes.

¹ Paper prepared for presentation at the *2004 Annual Meeting of the Population Association of America*, 1-3 April 2004, Boston, Massachusetts, U. S. A.

² Assistant Professor, University of the Philippines Population Institute.

Empirical researches have shown that young people who have been exposed to a variety of nontraditional living arrangements and family disruption developed more accepting attitudes towards premarital sex (Spruijt, 1997), have an increased likelihood of early sexual activity and childbearing (Smith, 1997) as well as increased prevalence of non-sexual risk behaviors such as smoking, drinking alcohol, drug use, stealing and vandalism (Urzua, 1993). Adolescents who grew up under the supervision of their father alone or their father with another partner exhibited greater propensity towards some risk behaviors particularly drug use, commercial sex and premarital sex (Cruz, Laguna and Raymundo, 2001). Meanwhile, having two biological parents in the home has been linked with postponement of sexual activity (Bakken and Winter, 2002; Smith, 1997) and with fewer partners during their lifetime (Bakken and Winter, 2002).

The increasing urbanward mobility of the young population especially among the female has also led to greater independence and weakening parental control. Living away from home has emerged as the most important variable linked to premarital sex risks among Filipino young adults with a higher likelihood of engaging in such practice noted among those who have lived away from home (Umali, 1999; and Raymundo and Lusterio, 1996).

This changing family environment makes the youth more vulnerable to risky sexual behaviors and its problematic consequences including unintended pregnancies and sexually transmitted diseases (STDs) and HIV-AIDS. Zablan, Marquez and Laguna (2003) have established that engagement in premarital sex, commercial sex, multiple-partner sex and unprotected sex put adolescents at risk of contracting serious reproductive health problems symptomatic of STDs. Also well-documented are the interrelationships of risky sexual activities, notably premarital sex, with a host of other health risk behaviors including smoking, drinking and drug use (Cruz and Raymundo 2004; Perkins et al, 1998; Smith, 1997; Small and Luster, 1994; Gillmore et al, 1992).

Recent statistics point to elevated levels and increasing trends in adolescent sexuality that should cause some concern. The UNAIDS estimates that more than half of all new HIV infections worldwide occur among young people under 25 years of age (United Nations, 2002). In the Philippines, approximately one-third of all HIV infections belong to youth in the 10-29 age bracket with twice as many in young women as in young men (Department of Health, 2003). Equally disturbing is the finding that although Filipino adolescents exhibit a near-universal awareness of HIV-AIDS, a sizable proportion are largely misinformed, for instance with regards to the curative nature of the disease (Zablan, Marquez and Laguna, 2004).

Meanwhile, according to recent data released by the National Statistics Office and Macro International (2004), the relative share of Filipino teenagers to total fertility has also been increasing over time (6.1% in 1993 to 7.5% in 2003) despite declines in overall fertility. More disturbing is the high proportion of unwanted fertility among adolescent women. Among Filipino women 15-24 years old, two out of five births were reportedly unwanted at the time of conception (National Statistics Office, Department of Health and Macro International, 1999).

These statistics are not totally unexpected considering that premarital sexual activities among Filipino adolescents have increased over the past decade from about 18 per cent in 1994 to 23 per cent in 2002 with only a quarter of such activities protected with some type of contraception (Natividad and Marquez, 2004).

Results from a series of adolescent surveys also point to liberalizing attitudes towards sexual issues among Filipino youth. A more liberal mode of thinking as seen from rising levels of approval of premarital sex and abortion among both male and female adolescents has been noted by Ventura and Cabigon (2004). Moreover, Kabamalan (2003) found increasing proportions among young Filipino women who approve of premarital sex and who perceive the society, their family, neighbors and friends to be more accepting of young unwed mothers.

Concern about the negative consequences as well as the rising levels of sexual risk-taking activities and the increasingly liberal attitudes towards sexuality have resulted in a substantial amount of research on the role the family plays in the sexual socialization of the young.

Communication between parent and child regarding sexual matters is one aspect of family dynamics that have received considerable attention from researchers. Several studies have established a positive association between parental communication and low-risk sexual behavior among adolescents (Blake et al, 2001; Miller, Forehand and Kotchik, 1999; Rodgers, 1999; Whitaker et al, 1999; Werner-Wilson, 1998; Jaccard, Dittus and Gordon, 1996; and Luster and Small, 1994). Miller, Forehand and Kotchik (1999) have uncovered significant associations between mother-adolescent general communication and mother-adolescent sexual communication with both the frequency of adolescent sexual intercourse and multiple partner-sex.

Communication about topics such as sexual behavior and AIDS, for instance, has been found to facilitate adolescents' knowledge about sex and their subsequent reduction in risk (Jaccard, Dittus and Gordon, 1996) as well as the adoption and internalization, at least on a short-term basis, of values, beliefs and behaviors that might prevent future high-risk sexual activity (Blake et al, 2001).

The association between parental communication and adolescent sexual behavior, however, remains ambiguous as at least two studies had shown contradictory findings. Furstenburg et al (1984) have found that teens who communicated little with their mothers were as likely to use effective birth control as were those who communicated well. Likewise, neither mother's communication nor their attitudes about premarital sex and contraception was significantly related to their daughter's use of contraceptive methods (Newcomer and Udry, 1985).

Family connectedness, also referred to in literature as family cohesion, family cohesiveness or family attachment, has also been found to have protective associations with adolescent sexual risk-taking behaviors (Markham et al, 2003; Miller, Forehand and Kotchik, 1999; Rodgers, 1999; Whitaker et al, 1999; O'Connor, 1998; Jaccard, Dittus and Gordon, 1996; Hovell et al, 1994; Small and Luster 1994; and Gillmore et al , 1992).

Weak parent attachment was associated with an increase in the probability of early sexual activity (O'Connor, 1998; Smith, 1997) and greater likelihood to engage in other high-risk activities such as the use of cigarettes, alcohol and marijuana, and to be emotionally upset or suicidal (O'Connor, 1998). Students in alternative schools who perceived high levels of family connectedness have also been found to be significantly less likely than their peers who perceived lower family connectedness to have ever had sex, had sex without a condom in the past three months and to have ever been involved in a pregnancy (Markham et al, 2003).

Contrary to these findings, Perkins et al (1998) have found no association between parental monitoring and family support with adolescent sexual activity which the investigators attribute to their use of a single-item measure of parental monitoring unlike other studies (e.g., Small and Luster, 1994) which employed a multi-item scale. However, they did not offer any reason why family support was not related with sexual activity. Cardenas (1993) also found no significant relationship between premarital sexual experience and family cohesion which was measured by whether the respondent's family prays and attends Mass together.

Another aspect of the family that has consistently demonstrated association with sexual risk-taking is the youth's perceptions of parental permissiveness. Adolescents who perceived their parents as accepting of premarital adolescent sexual activity were more likely to be sexually experienced (Jaccard, Dittus and Gordon, 1996; Small and Luster, 1994; and Baker, Thalberg and Morrison, 1988) and are considerably more likely to use contraception than are the children of disapproving parents (Baker, Thalberg and Morrison, 1988).

Permissive parental attitudes have also been related to earlier sexual debut among teens (Hovell et al, 1994; Small and Luster, 1994; and Thornton and Camburn, 1987) and decreased frequency of adolescent sexual intercourse and multiple partner-sex (Miller, Forehand and Kotchik, 1999).

The negative association persists even among subgroups of the youth. Donenberg et al (2002) have found that, among adolescents in psychiatric care, parental permissiveness along with parental monitoring were found to be related to sexual risk-taking and such association was stronger in troubled girls than in troubled boys.

Among sexually active African-American youths, adolescent perceptions of maternal disapproval of premarital sex and satisfaction with mother-child relationship were significantly related to abstinence from adolescent sexual activity, less frequent sexual intercourse and more consistent use of contraceptives (Jaccard, Dittus and Gordon, 1996).

In Filipino setting, adolescents who perceived their parents to hold liberal attitudes exhibited increased likelihood of engaging not only in premarital sex (Cruz, Laguna and Raymundo, 2001; and Raymundo and Lusterio, 1996) but in commercial sex as well as in smoking, drinking and drug use (Cruz, Laguna and Raymundo, 2001).

With regards to parental supervision or monitoring, literature generally show strong association with reduced sexual activities although a number of studies (e.g., Smith, 1997; and Gillmore et al, 1992) did find a lack of association between parental monitoring and risky sexual behavior.

Parental monitoring significantly decreases the odds that sexually active adolescents would be high risk-takers (Rodgers, 1999) and this holds true even among adolescents in psychiatric care (Donenberg et al, 2002). Parental supervision of the social activities of adolescents was also associated with delayed sexual initiation or less risky sexual behavior (Luster and Small, 1994; Small and Luster, 1994). Maternal monitoring was also among the family factors that Miller, Forehand and Kotchik (1999) has found to impinge on engagement in multiple partner-sex and the frequency of adolescent sexual intercourse.

Among African-American female teens, less parental monitoring is found to be associated with engaging in sex with multiple partners, non-use of condom during their most recent act of sexual intercourse and higher prevalence of laboratory-confirmed STDs (DiClemente et al, 2001).

Objectives and hypotheses

The study aims to gain insight on the role that the family plays in influencing adolescent sexual risk-taking and to determine whether gender moderates the relationships between family connectedness, parental permissiveness and parent-child communication and risky sexual behavior. In so doing, the study hopes to clarify inconclusive and inconsistent findings cited in the preceding review of literature.

The study differs from previous investigations conducted using Philippine data in several aspects. The present one employs a composite measure of overall sexual risk-taking similar to the ones developed by Donenberg et al (2002) and Rodgers (1999) which to the best of the author's knowledge represents a pioneering effort as far as Filipino studies on adolescents are concerned.

Moreover, the present study extends Filipino literature by examining an array of risky sexual activities. A large number of previous researches on Filipino youth (e.g., Umali, 1999; Cardenas, 1993) have overwhelmingly focused on premarital sex owing largely to data limitations.

On account of these findings from empirical researches, it is hypothesized that higher levels of family connectedness and parent-child communication would have an inhibitory effect on sexual risk-taking while higher levels of parental permissiveness would predispose the youth to sexual risk-taking. In addition, the study hypothesizes that engaging in risky sex would increase with age and that males would be more predisposed to sexual risk-taking compared to females.

The study first describes the extent of sexual risk-taking among Filipino adolescents and then examines its association with several indicators of family processes. As a final note, the terms "adolescents', "youth" and "young people" were used interchangeably in the study.

Data

The data for this study were taken from the Young Adult Fertility and Sexuality Survey which was conducted in April to June 2002. It is the third in a series of nationally-representative surveys on adolescents jointly undertaken by the University of the Philippines Population Institute and the Demographic Research and Development Foundation. The David and Lucile Packard Foundation provided funding support for the survey. Face-to-face interviews using structured interview schedules were employed to elicit information on the knowledge, attitude and behavior

of Filipino youth in a wide range of sexual and non-sexual issues along with the institutions, including the family, which are believed to influence these behaviors. The respondents consisted of nearly 20,000 Filipino males and females in the ages 15-27. The analysis, however, was restricted to the sample of 16,651 adolescents who are between 15 to 24 years old.

Measures

Family processes variables

In the study, focus was centered on three family processes that are believed to influence sexual risk-taking as documented in previous researches. These were family connectedness, parental permissiveness and parent-child communication. Indices were constructed to measure each of these variables.

Family connectedness measures family closeness and the extent to which the adolescent gets along with his parents. The first was determined using responses to six statements describing the youth's family life when he was about 12 to 18 years old. These statements include: "Family members are supportive of each other during difficult times," "Family members know each other's close friends," "Discipline is fair in our family," "In our family, everyone shares responsibilities," "It is easier to discuss problems with people outside the family than with my family member," and "In our family, everyone goes his/her own way." Adolescents responded to each item using a 5-point Likert scale ranging from 1 (Almost always) to 5 (Almost never). A score of one was given to responses of "Almost always" to the first four statements and to responses of "Almost never" to the last two statements. Respondents were also asked two questions regarding the extent to which the adolescent gets along with his parents: one concerns his relationship with his father and the other with his mother. A response of "we get along well all the time" to each of these questions was likewise given a score of one. All of the responses were added to form an index with a total score ranging from 0 to 8 with higher scores reflecting greater connectedness. The Cronbach's alpha coefficient for the index was 0.6814.

Parental permissiveness was determined from a seven-item scale that elicited the youth's perception of the attitudes of each of his parents (or the persons who raised him) towards certain social activities or situations (when he was still single, if the respondent has already been married). Specifically, the respondent was asked whether he thinks his father or mother would usually approve of activities that include going to a party at short notice, going out on a date unchaperoned, going to excursions or picnics with friends, joining clubs or organizations either in the school or in the community, living away from home, getting married at an early age and spending overnight at a friend's house. The questions were asked separately for each parent. Responses to the seven items were summed to produce an index of parental permissiveness with higher scores denoting greater level of permissiveness. The index ranges from 0 to 14 and has an alpha coefficient of 0.8158.

Parent-child communication was assessed using three questions: (1) "Who was the person or group of persons most helpful in what you know about puberty?"; (2) "If you wanted some instruction or information on sex, whom would you most likely to consult?"; and (3) "With whom do/did you discuss sex at home?." If the respondent mentioned either his father or his mother in each of the questions, a score of one is given; if he mentioned both parents, a score of two is given thereby creating an index that ranges from 0 (did not mention any of the parents at all) to 6 (mentioned both parents in the three questions). Higher scores in this index correspond to greater parent-child communication. The alpha coefficient for the index was 0.5656.

Risky sexual behavior variables

Risky sexual behaviors refer to sexual activities that are identified as increasing the risk of contracting HIV-AIDS and other sexually transmitted diseases. Specifically, five types of risky sexual behavior were used in the analysis: commercial sex, sex with the same gender, sex with multiple partners, casual sex and unprotected sex.

Commercial sex includes any sexual encounter that involves exchanges either for money or other favor. Specifically, the adolescents were asked whether they have paid or have been paid in cash or in kind in exchange for sexual intercourse.

Sex with the same gender was determined from responses to questions on whether any of the adolescents' sexual contacts are with someone of the same gender in situations such as premarital sex, having "gone all the way" during dates, commercial sex as a client and sexual intercourse in the last twelve months. Affirmative responses to any of these questions indicate sexual experience with the same gender.

Sex with multiple partners was derived from affirmative responses on whether the adolescents have engaged in premarital sex with other than their first partner and whether they have engaged in commercial sex with several partners. In addition, married respondents were asked whether they have had sex with someone other than their spouse or partner while they were married.

Sex with a casual partner involves premarital sexual encounter with a person other than his/her boyfriend/girlfriend or fiancé/fiancée, or with persons whom the adolescent has no serious commitment such as an acquaintance, friend, admirer, classmate, neighbor or a boardmate.

Unprotected sex refers to non-use of condom, regardless of whether they were used alone or in combination with another method, during any premarital, commercial or extramarital sexual encounters.

Each of these five items denoting specific types of risky sex was transformed into a dichotomous variable with a score of either 0 (never engaged in the behavior) or 1 (ever engaged in the behavior).

In addition, two measures of overall sexual risk-taking were created. The first is a dichotomous variable coded as either 0 (never engaged in any of the risky sexual behaviors under study) and 1 (have engaged in any of the five types of risky sexual activities). An additional measure was constructed which was used to measure of the extent of multiple sexual risk-taking. This measure is a composite index based on the total number of risky sexual behaviors that were

engaged in by the adolescent (Cronbach's alpha = 0.7015). This index ranges from 0 (no sexual risk-taking) to 5 (engaging in five different types of risky sexual behavior).

As Donenberg et al (2002) had pointed out, there is value in measuring overall sexual risktaking since diverse sexual risk behaviors have been shown to interrelate justifying the use of a composite score. Hence, each of the five indicators measuring the specific risky sexual behaviors was analyzed individually along with the overall measure of sexual risk-taking.

Method of analysis

Binary logistic regression analysis was used to identify which family processes predicted sexual risk-taking. Logistic regression allows us to determine the likelihood of engaging in risky sexual behaviors when other factors are controlled. All in all, six separate logistic regression models were developed regressing the overall measure of sexual risk-taking as well as each of the five specific risky sexual behaviors.

To simplify the modeling process, only two covariates that were believed to influence sexual risk-taking the most were included in the model. Inasmuch as age has the potential of being associated with both risky sexual behaviors and family processes, it was included as a predictor in the models. Likewise, since gender differences may qualify the linkages between parenting behaviors and adolescent sexual risk-taking, it was also included as a covariate.

Furthermore, to incorporate the joint effect of gender with each of the family processes variables on sexual risk-taking, multiplicative product interaction terms were added to the model. In order to reduce multicollinearity that might arise with the inclusion of crossproduct interaction terms in the model, the main effects were centered prior to analysis. Centering the variables was done by subtracting the mean of the variable from the value of each case as outlined by Aiken and West (1991). The centered main effects were then multiplied and the resulting products used as additional predictors in the regression models.

Results

Sample characteristics

Table 1 presents the distribution of selected characteristics of the sample adolescents.¹ Female youth (52.5%) in the sample outnumber the males (47.5%). Majority of both male and

female adolescents belongs to the younger age group. Six out of ten are still in their teen years while the remainder are in their early twenties.

¹ For additional information on the background characte^Astics of the sample respondents, please refer to Berja and Ogena (2004).

Characteristics	Male	Female	Both sexes	
Age				
15-19	62.3	58.8	60.4	
20-24	37.7	41.2	39.6	
Marital status				
Never married	92.0	76.7	84.0	
Ever married	8.0	23.3	16.0	
Person(s) who raised the youth				
Both parents	84.4	82.1	83.2	
One parent alone	6.9	7.4	7.2	
One parent with another	3.0	3.6	3.3	
Other people	5.7	7.0	6.4	
Residential arrangement				
Living with both parents	67.1	55.4	60.9	
Living with one parent	6.4	5.0	5.7	
Living with one parent/one dead	9.2	7.3	8.2	
Not living with parents	16.4	31.2	24.1	
Both parents are dead	0.8	1.0	1.0	
Sexual experience				
Ever had sex	33.8	26.6	30.0	
Never had sex	66.2	73.4	70.0	
Total	100.0	100.0	100.0	
(N of cases)	(7,903)	(8,747)	(16,651)	

Table 1. Percentage distribution of adolescents by selected characteristics: Philippines, 2002

Given the young composition of the sample, it comes as no surprise that the adolescents are predominantly single. This is especially true among males of whom nine of ten have never been married. In contrast, nearly a quarter of the females are married confirming women's earlier entry into marital union compared to their male counterparts.

Eight of ten adolescents were raised by both parents while seven percent were brought up alone by a single parent. Three percent were raised by one parent along with another person. Nearly six percent of males and seven percent of females were raised by people other than their fathers and mothers. The figures suggest that, to a large extent, Filipino youth are growing up within the protective environment of their family.

In terms of current residential arrangement, majority of the youth are still residing with both parents. This is especially pronounced among males of whom 67 percent are co-residing with both mother and father while only 55 percent of females do so. Worth noting is the substantial proportion (31 percent) of females who are no longer residing with their parents. This figure is nearly double of that of males (16 percent). The data validate the greater propensity among

young Filipino women to leave their parental homes early as noted by Laguna (2003) either because of studies or employment opportunities. The elevated level of women who have left their parental abode can also be attributed to the substantial proportion who have been married as noted earlier which results either in the establishment of a separate household or in co-residence with the family of the husband.

A clear gender differential with regards to sexual experience is evident from the data. Two of three adolescent males have reportedly never engaged in sexual intercourse while nearly threequarters of female youth remained sexually inexperienced.

Family processes

The means and standard deviations of the family processes indices are provided in Table 2. No substantial gender difference was found with regards to family connectedness which is an indicator of the adolescent's closeness to his parents and other family members. Males registered an average score of 3.5 while females recorded a mean of 3.4 in the index.

Males posted a substantially higher average in the parental permissiveness scale relative to females. The males' mean score of 8.2 is nearly two points higher than the females' (6.4). These figures signify that relative to males, female youth regard their parents as less permissive. If the youth's perception reflects the actual parental behavior, the finding is indicative of the differential treatment in the child-rearing of sons and daughters in Filipino families as noted by Ujano-Batangan (2003) and Medina (2001). It is common among Filipino families to allow Filipino boys to stay out late while the girls are expected to be at home most of the time and their behavior with respect to the opposite sex is more restricted compared to the boys.

Family Processes	Range	Male		Female		Both sexes	
	Range	Mean	S.D.	Mean	S.D.	Mean	S.D.
Family connectedness	0-8	3.5	2.1	3.4	2.2	3.4	2.1
Parental permissiveness	0-14	8.2	3.4	6.4	3.2	7.2	3.4
Parent-child communication	0-6	1.1	1.2	1.3	1.0	1.2	1.1
(N of cases)		(7,9	03)	(8,	747)	(16,	651)

Table 2. Mean and standard deviation of family processes score of adolescents
by gender: Philippines, 2002

The fact that sons are given more leeway by their parents in their social activities while daughters are held with a tighter rein suggests that the double standard in sexual socialization is still pervasive in Philippine society. The more restrictive parental control imposed on daughters than on sons is not without merit since females are more vulnerable to the consequences of sexual activity such as pregnancy. Female youth, however, enjoyed a slight advantage over males (1.3 vs. 1.1) in so far as parent-child communication is concerned. However, the average scores are relatively in the low side considering that six is the possible maximum score in the scale. The low averages imply that the youth commonly consult or discuss intimate topics such as sex and puberty with only one parent lending support to Raymundo and Laguna's (2001) finding that parents are not the pre-ferred confidantes of Filipino adolescents with regards to sexual matters.

Risky sexual behaviors

Table 3 displays the prevalence levels of both the overall and specific risky sexual behaviors according to gender. A little more than a quarter of young Filipinos have engaged in risky sex. Males, as expected, exhibit greater proclivity to these problem behaviors as three of ten male youth have reportedly engaged in at least one risky sexual activity. In contrast, only 22 percent of their female counterparts admitted to engaging in such behavior.

Consistent with the findings of O'Connor (2000), Bell et al (1999) and Newcomer and Udry (1985), males consistently posted higher prevalence levels in each of the risky sexual practices with the greatest gender differential observed in sex with multiple partners (16.5% for males vs. 1.7% for females). In all but one risky sexual behavior (unprotected sex), females recorded negligible proportions.

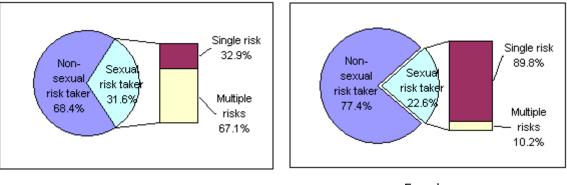
Behavior	Male	Female	Both sexes
Overall risky sex	31.6	22.6	26.9
Commercial sex	8.9	0.1	4.3
Sex with same gender	5.5	1.0	3.2
Sex with multiple partners	16.5	1.7	8.8
Sex with a casual partner	13.1	0.7	6.6
Unprotected sex	27.0	21.9	24.3
(N of cases)	(7,904)	(8,748)	(16,651)

Table 3.	Percent of adolescents who engaged in risky sexual behaviors
	by gender: Philippines, 2002

Unprotected sex is the most common risky sexual activity while sex with multiple partners, casual sex, commercial sex and sex with the same gender appear to be less preponderant among young people, most especially among females.

Figure 1 depicts the extent of sexual risk-taking among the adolescents. Again, an obvious gender disparity is apparent. Multiple sexual-risk-taking tend to be more the domain of males than of females. Among male sexual risk-takers, two-thirds have engaged in at least two risky sexual activities while only one of ten of their female counterparts are multiple risk-takers.

Figure 1. Percentage distribution of adolescents by sexual risk-taking behavior and gender: Philippines, 2002



Male

Female

There are several possible explanations for the substantial gender differentials in sexual risk-taking among men and women. First is that the motivating factor in sexual risk-taking is different for men and women. While men's sexual activity is characterized by strong sensation-seeking component, women put greater emphasis on the emotional and relational significance of sex (Bell et al, 1999). Hence, women would be less likely to engage in sex with people with whom they have no committed relationship such as casual acquaintances and commercial sex workers. The present data substantiate this as the female levels of commercial sex and casual sex practices are the lowest among the different types of risky sexual behavior being examined.

Moreover, men believe that they have "nothing to lose" when it comes to expressing their sexuality in varied ways. Women, on the other hand, need to practice some restraint as they have "everything to lose and nothing to gain." The women are the ones who largely bear the possible consequences of sexual adventurousness especially the responsibility of pregnancy.

Regression analyses

The results of logistic regression analyses predicting overall and specific risky sexual activities are displayed in Table 4. Both gender and age exhibit significant associations with overall sexual risk-taking as well as with all types of risky sexual behaviors. Validating the study's hypotheses, age demonstrates the expected positive association with sexual risk-taking while males exhibited greater propensity to engage in sexual risk-taking relative to females.

In terms of overall risky sexual behavior, an increase in age raises the odds of engaging in overall risky sexual behavior by 1.5. Males are 1.8 times more likely to engage in sexual risk-taking than females. All of the main effects of the three family processes emerged as significant predictors of overall sexual risk-taking. For every one-point increase in the family connectedness score, the odds of engaging in risky sex decreases by 0.96. Similarly, an increase in parent-child communication was significantly associated with a 0.81 percent reduction in the likelihood of overall risky sex. However, higher levels of perceived parental permissiveness increase the odds by 1.02. Looking at the interaction terms, the effect of parent-child communication disappears

signifying that the influence of parent-child communication does not depend on gender. Together, the set of predictors explained 20.16% of the variance in overall risky sexual behavior.

Table 4 also reveals that only the main effect of parent-child communication appeared to exert a significant effect on commercial sex activities. A one-unit increase in parent-child communication decreases by half the odds of engaging in commercial sex among adolescents. The selected predictors explain 23.26% of the variability in commercial sex behavior.

Table 4. Summary statistics from logistic regression equations predicting the risk of adolescents to engage in overall and specific risky sexual behaviors: Philippines, 2002

Predictors –	Overall ris	Overall risky sex		Commercial sex		Sex with same gender	
	Ехр В	S.E.	Exp B	S.E.	Exp B	S.E.	
Gender	1.79***	0.04	98.89***	0.40	10.88***	0.10	
Age	1.49***	0.01	1.29***	0.02	1.17***	0.01	
Family connectedness	0.96***	0.01	0.89	0.08	0.91*	0.02	
Parental permissiveness	1.02***	0.01	1.07	0.04	1.07**	0.01	
Parent-child communication	0.81***	0.02	0.57**	0.21	0.83*	0.05	
Gender x Family connectedness	1.08***	0.02	1.23	0.15	1.07	0.04	
Gender x Parental permissiveness	1.09***	0.01	0.97	0.08	0.90*	0.03	
Gender x Parent-child communication	1.05	0.04	2.20	0.41	0.96	0.10	
R ²	0.20	16	0.2320	5	0.1267	,	

Notes: For gender, female is the omitted/reference category. * p < 0.05 ** p < 0.01 *** p < 0.001

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Predictors	Sex with multiple partners		Sex with a casual partner		Unprotected sex	
	Exp B	S.E.	Ехр В	S.E.	Exp B	S.E.
Gender	12.90***	0.10	23.97***	0.15	1.38***	0.04
Age	1.33***	0.01	1.25***	0.01	1.47***	0.01
Family connectedness	0.94**	0.02	0.92*	0.04	0.96***	0.01
Parental permissiveness	1.00	0.01	1.02	0.02	1.02**	0.01
Parent-child communication	0.85**	0.05	0.82*	0.08	0.81***	0.02
Gender x Family connectedness	1.12**	0.04	1.16*	0.07	1.08***	0.02
Gender x Parental permissiveness	1.12***	0.03	1.06	0.04	1.08***	0.01
Gender x Parent-child communication	1.06	0.10	1.14	0.15	1.04	0.04
R ²	0.2195		0.210	1	0.1861	-

Table 4 (con't)

Notes: For gender, female is the omitted/reference category.

* p < 0.05 ** p < 0.01 *** p < 0.001

In addition to age and sex, the main effects of all familial variables were significantly associated with engaging in sex with the same gender. Increases in family connectedness and parent-child communication scales reduce the odds of engaging in same-sex relations by 0.91 and 0.83, respectively. In contrast, an increase in parental permissiveness raises the odds by a factor of 1.07. Among the three interaction effects, only the interaction of parental permissiveness with gender was a statistically significant predictor of sex with the same gender. The model accounted for 12.67 % of the variance in sexual activities with the same gender.

Family connectedness is strongly associated with multiple sex. Both its main effect and interaction term with gender were statistically significant. The association of parental permissiveness is dependent on gender as its main effect was not found to be significant but the interaction term with gender emerged as a significant predictor of sex with multiple partners. In contrast, the association of parental communication with multiple sex does not differ by gender but appears to affect multiple-partner sex independently. The model explains twenty two percent of the variability in sex with multiple partners.

The data in Table 4 also show that both the main and interaction effects of family connectedness were significant predictors of sex with a casual partner. However, for parent-child communication, only the main effect demonstrated significant association while for parental permissiveness, both the main effect and its interaction with gender were not statistically significant. The variables accounted for 21.04% in the variance of casual sex.

The association of the set of variables predicting unprotected sex mirrors those of overall risky sexual behavior and, in fact, the coefficients of family process variables reflect the same direction and nearly equal levels as those of overall risky sex. All of the familial factors are highly associated with the risk of engaging in unprotected sex with the exception of the interaction of parental communication with gender which did not emerge as statistically significant. Again, for each unit increase in both family connectedness and parent-child communication lowers the odds by .96 and 0.81, respectively. Adolescents with higher levels of perceived parental permissiveness were more likely than their peers to practice unprotected sex. The percentage of variability explained by the set of predictors is 18.61%.

Discussion

The study extends current research on the protective influence of the family on sexual risk-taking behaviors by examining the relationship between family connectedness, parental permissiveness and parent-child communication, on one hand and commercial sex, sex with same gender, multiple sex, casual sex and unprotected sex along with an overall indicator of sexual risk-taking on the other.

The study shed light on the different mechanisms on how the family, specifically parents, provides protection from adolescent sexual risk-taking. Results of the multivariate analyses have established the protective influence of both parental connectedness and parent-child communication as well as the promotive effect of parental permissiveness on risky sexual behaviors.

The findings indicate that parents need to be key players in prevention efforts as they can serve as shields from situations where overwhelming peer pressure to engage in risky sex mounts among adolescents. The family, as the primary socializing agent, shoulders the responsibility of ensuring proper values orientation of the young and parental behavior and attitudes are considered critical in the sexual socialization of adolescents.

While majority of Filipino youth remain sexually inactive, the sheer size of the Filipino adolescent population which stands at 15.1 million as of the 2000 round of census (Ericta, 2003) underscores the importance of interventions geared towards the youth. The 26.9 percent of adolescents who have engaged in any of the risky sexual practices explored in the study may not be staggering. This proportion, however, when translated into absolute numbers amount to a sizable four million young people who are not cautious about their sexual practices thereby increasing their risk of contracting STDs and HIV-AIDS.

Consistent with the findings of previous studies, sexual risk-taking increases with age. This holds true for each and every specific risky sex activities as well as for overall sexual risk-taking behavior. The study also lends support to prior investigations regarding the significant influence of gender since the study demonstrated that gender moderates the relationship between family process variables and sexual risk-taking. Males overwhelmingly exhibited increased odds of engaging in risky sex whiles females recorded reduced likelihood underscoring the importance of developing gender-specific intervention programs. On account of males' higher proclivity towards sexual risk-taking, greater efforts should be extended to reach male adolescents. Females, however, should not be altogether neglected since the physical, psychological and emotional burdens of the consequences of risky sex especially of unplanned pregnancy may be greater among girls.

For both sexes, the study indicates that cultivating closer relationship between parents and children may be a deterrent to sexual risk-taking as adolescents who felt highly connected with their family were more likely to refrain from venturing into risky sexual activities. Youth who perceived their parents to be permissive were far more likely than their peers to engage in sexual risk-taking. As Rodgers (1999) explains, a solid parent-child bond can "create an atmosphere in which parents' views of adolescent sexual behavior, expressed either directly or indirectly, may be internalized by the adolescent and may, therefore, play a protective role by encouraging sexually active youth to minimize their sexual risk." In other words, a close parent-child relationship may foster willingness on the part of adolescents to consider parental wishes and concerns when they face varied options concerning sexual behavior.

More than family connectedness and parental permissiveness, it is parent-child communication which emerged as a consistent significant predictor of all types of risky sexual activities. Increased parental communication consistently predicted a decrease in the likelihood of the young to engage in sexual risk-taking activities although its association with risky sex is not moderated by gender as all its interaction terms were not found to be statistically significant as shown by the logistic regression analyses. The exact mechanism by which communication influences adolescent behavior is beyond the scope of the study. However, Rodgers (1999) proffers that positive communication may foster an identification with parental values and knowledge of parental expectations regarding sexual responsibility as well as specific ways to minimize sexual risks, for instance, in the area of contraception.

Indeed, in the area of sexuality, parents are considered to be the ideal sources of information (Tan et al, 2001). At an age where increasing dependence on peers and easy access to all forms of mass media such as the internet may provide the youth erroneous and biased information, the role of parents should gain more prominence. The parents with their wide and lengthy experience as well as the expected greater concern to their young may indeed be the best option as far as provision of sexual information is concerned.

However, it is a sad reality that while families are often cited as sources of information on sex, discussions between Filipino parents and children often revolves around information on gender roles and prohibitions and warnings about sexual activity (Tan, Batangan and Espanola, 2001) and deeper discussions of sexual issues seem to be generally absent. Being an intimate, intensely private experience, sex as a topic for open discussions is made difficult by cultural taboos and by the "secrecy" surrounding it. As Ujano-Batangan (2003) had observed, "the most serious problem elicited in relation to sexual risks among young individuals is an imposed silence within families that prevents discussion of sexual issues." As a subject matter for discussion between parents and children, sex is often shrouded in secrecy and guilt and discomfort. Nowhere is this truer than in parental discussion about contraception to which many object on moral and religious grounds.

Towards this end, efforts should therefore be directed to helping parents become effective sex educators. As Whitaker et al (1999) aptly noted, parent-teenager communication may encourage teenagers to use condoms, but only if parents are skilled, comfortable and open in discussions about sexuality and risks related to sexual behavior. The parents themselves should therefore be equipped with adequate communication skills to better impart to the young accurate and value-laden information as well as developmentally-appropriate messages.

Several methodological limitations of the study should be noted. Inasmuch as the data were collected through self-report, the perceptions of the young respondents about their parents' behavior may not accurately characterize the actual level of parental behavior.

In addition, the relatively low reliability levels of parent-child communication and parental connectedness indices does not negate the study's findings but calls for a need to exercise caution in the generalization of findings and for the development of a more refined measure of these constructs.

The study looked at the combined influence of parents (e.g., in parent-child communication and parental permissiveness) on adolescent sexual behavior. It would also be worthwhile to segregate the effect of mothers and fathers and examine parenting behaviors separately. An additional avenue for future inquiry would be the examination of other indicators of adolescent sexual behavior such as age at first intercourse, number of sex partners and frequency of intercourse, to name a few, in order to arrive at a more complete picture of sexual risk-taking.

On account of data limitation, the present study did not go beyond other dimensions of parent-child communication. In order to gain a more thorough understanding of the precise mechanisms by which parental communication influences risk-taking activities among the young, dimensions of the parental communication process such as the content of information that is being communicated, the manner in which the information is communicated and the frequency of communication could also be worth exploring.

In conclusion, the study affirms that as the youth navigate the sometimes-turbulent course from childhood to adulthood, the family remains to be the anchor grounding them and steering them away from the lure of sexual risks. The study underscores the need for gender-sensitive activities that foster closer parent-child relationship and enhance parent-child communication to increase the effectiveness of intervention programs aimed at reducing sexual risk-taking among Filipino youth.

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