

CHAPTER VI

DISCUSSION

6.1 Introduction

The purpose of this study was to explore the following research questions: What is the relationship between socio-demographic background of youth and parents, intimate relationship and partner's undesirable behaviors, and peer influence, parent-youth interaction namely perceived parental-youth connectedness, parent-youth general and sexual communication and parental expectation regarding sexuality and youth's sexual attitudes and behaviors? What influence, if any, does the gender of the adolescent have on the relationship? Dependent variables that were selected were sexual attitudes and behaviors. This chapter addresses how the findings meet the objectives of the study and compares study findings with findings from previous studies. The discussion of research results is divided into four parts. First, the methodology is discussed by assessing the impact that certain biases might have on the results, including a description of strengths and limitations of this study. Secondly, the general characteristic of respondents related to sexual attitudes and behaviors are discussed. This is followed by a analysis of the characteristics of parents of sexually active youth and their sexual attitudes. Finally, the main findings are discussed and related to results to broader perspectives.

6.2 Strengths

1. To my knowledge, this is the first study in the field of adolescent sexuality in the Lao PDR that has addressed the issue of parent-youth interaction, and the complexity of sexual attitudes and behaviors from a multi-systems perspective.
2. This is also the first study in South East Asia that deals with the assessment of parent-youth interaction for the purpose of developing intervention programs.

3. Many studies use non-representative samples or samples of girls only or boys only or school samples, thus making it difficult to generalize to a broader population. This study focused on a population-based sample and participants were randomly selected by the sampling method of selection through probability proportional to size.
4. The study addressed factors within a multiple level framework, which included the individual, family and extra- family levels.
5. Strength of this study was to employ both quantitative and qualitative research methods to explain parent-child closeness and communication about sexual issues.
6. The present study contributes to the growing body of literature on adolescent health that focuses on reproductive health programs targeted on the contextual factors influencing adolescent sexual behavior and the results can be used to enhance the impact of program interventions.
7. This study adds to the existing literature on parenting processes and adolescent sexual attitudes and behaviors by analyzing sons and daughters separately.

6.3 Scope of Study Limitations

The study has several limitations.

1. The study focused on socially and politically sensitive issues in Laos: sexual attitudes and behaviors. In such a situation self-administered questionnaires may be the best methodology to obtain valid data. However, this study used face-to-face administered questionnaires because the study was carried out with a community-based youth sample. It is very difficult to distribute self-administered questionnaires in these settings. In addition, the qualifications of out-of-school youth were uncertain. As mentioned in Chapter IV, out-of-school youth might have low qualifications, so if the study relied on self-administered questionnaires, there could be a problem of item non-response. In order to reduce the problems of using face-to-face interviews extra attention was paid in interviewer training in how to ask questions on sexual attitudes and behaviors. In addition, the possibility of over reporting by

males of sexual behaviors and underreporting by females must be acknowledged. Sexual experience, condom use and number of sex partners might not be accurately reported, although the study protocol ensure the confidentiality and privacy of respondents and reliability checks were carried out to assess the consistency of responses on sexual behaviors. Respondents may feel uncomfortable reporting their sexual experience, and social norms towards youth sexual behaviors are likely to result in a bias report of sexual activity.

2. In this study exposure and outcome variables were measured at the same point in time. Therefore, it is generally not possible to distinguish whether exposure proceeded or followed the outcome. The hierarchy of variables in the model is hypothetical, as are any causative relationships that may be inferred. A particular problem with cross sectional study involves the interpretation of evidence of sexual attitudes and behaviours, which are related to youth's report (Fenton, Johnson, McManus & Erens, 2000).
3. Participants of this study are not drawn from the whole country, so the results cannot be generalized for the population of Lao PDR. Hence caution must be exercised in generalizing the findings to other areas.
4. Another aspect that needs to be considered is the participation bias that could result from systematic differences in the characteristics of those respondents who agreed to participate in the study in comparison with those who did not agree to participate. Although high response rates were obtained in this study, as well as in most developing countries (Cleland & Ferry, 1995), participation bias may introduce a significant error in measuring estimates of behavioral risk. As Clement (1990) suggested that the more intrusive a survey, the higher barrier to the intimacy, the more likely that participation bias will over estimate of the frequency of sexual behavior, since those with conservative sexual attitudes were less likely to participate. However some authors found little difference in the sexual behavior of those who reported early and late to a sexual behavior survey (Biggar & Melbye, 1992; Lauman et al., 1994).

5. Another bias is interviewer and interviewee biases. There are some biases in reporting sexual activity and condom use among youth because sexual activity is a private matter. It is often assumed that male youth might over-report sexual behavior and female youth might under-report sexual behavior. Respondents might have been uncomfortable reporting their sexual activity in front of interviewers even though the study ensures their anonymity, confidentiality and privacy. Interviewers might also introduce reporting bias contributing to decreased disclosure of sexual behaviors, particularly as interviewers were young medical doctors who had just graduated from the Faculty of Medical Sciences. However, as noted above special attention was given in training to prepare the interviewers to ask questions about sexual behavior.
6. This study only focused on heterosexual intercourse and did not taken into account homosexual; intercourse and masturbation because homosexuality has not been addressed as major social and public health problems in the Lao PDR yet and it was difficult to translate the meaning of masturbation into the local word during the pilot testing of questionnaire survey.
7. The role of FGDs in this study is gathered information on the sexual norms and value of unmarried youth, the interaction between parents and youth in terms of their closeness, connectedness and communication about general and sexual issues. However, the FGDs were carried out before the structured questionnaire was administered, not after analyzing the data from quantitative research, thus it might not provide a full explanation of the phenomena of youth's sexual attitudes and behaviors occurred.
8. The data regarding sexual behaviors come from adolescent reports, and these reports and perceptions are not entirely accurate, although they have some validity (Biglan et al., 1990).
9. Respondent's perception of the mother's/father's attitudes may constitute a valid influence on the youth's behavior, but it may not reflect the parent's actual beliefs. Therefore, the full effect of parental expectation on sexuality cannot be examined by asking the youth to report them.

10. In communication and connectedness between parent and child, the reports of the child may be different from those of parents. A higher degree of reliability may have been obtained if data were also collected from respondent's parents.
11. The scale of measurement of parent-respondent connectedness, general and sexual communication was based on the Likert scale. Respondents tended to reply on the middle of the scale as uncertain and this might be lead to bias. In addition, the measurement of parent-respondent connectedness was adapted from items used in Western countries and might not be totally appropriate for the Lao context. The construction of measurement of parent-respondent sexual communication lacks questions assessing important communication dimensions including style, content, timing, and general family environment.
12. The scale measurement of 'Sexual Attitudes' initially was assessed with eighteen items and then five items were deleted in order to increase the internal consistency and finally, the scale of 'Sexual Attitudes' was measured with thirteen sexual attitude items. Although the scale has acceptable internal consistency reliability, a more comprehensive assessment of sexual attitudes may have been more sensitive. A more comprehensive assessment of sexual attitudes should be undertaken in future studies parallel with other measures that are associated with sexual behaviors. The measurement of sexual attitudes also was based on the Likert scale, with respondents tending to reply in the middle of the scale as uncertain.
13. The measurement of perceived parental expectation regarding sexuality was not capturing all dimensions of sexual behaviors when disaggregated sexual behaviors into several outcomes ('Age at First Sex', Condom Use', 'Number of Sex Partners') and also based on the Likert scale with 5-point scale.
14. There were limitations in examining factors of 'Condom Use during the last six months' prior to the survey. This questionnaire did not included all the variables that used to assess 'Condom Use' due to primary objective of this

study was to determine the sexual attitudes and behaviors of unmarried youth; however for 'Condom Use', there were specific variables determining 'Condom Use'. In addition, the sample size for 'Condom Use' for female was small and was not included in the multivariate analysis.

15. The analysis of factors determining 'Age at First Sexual Intercourse' for females was also inadequate because the sample size for females was small.
16. Frequency of sexual intercourse during the last six months prior to the interview was not included in the statistical analysis both (bi-variate and multivariate) due to small sample size for meaningful analysis.

6.4 Sexual Attitudes

Talking about sexuality among young people in Lao society is relatively acceptable, especially for males. The study pointed out that most youth had attitudes towards discussing on sexual matters, which were relatively liberal, while a few held ambivalent attitudes towards discussing sexuality. Lao customs and traditional sexual norms and values create a taboo about talking sexual matters, which still have an influence within the society.

The cultural and social environment supports the greater influence of men in most areas of society, including in sexuality and reproduction (Ahlberg, 1991). Social norms regulate sexual relations in the way that girls are expected to keep their virginity until marriage, while boys can have sex with many girls. Young men are encouraged to be sexually active and are viewed as virile and initiators of sexual encounters. This study found that there was a substantial difference between males and females in reporting sexual attitudes. Females hold more conservative attitudes towards sexuality than do males. The FGDs suggested that differences in gender values and a double standard for sexual behavior still persisted. Boys do not lose anything by having sex, while a girl's chastity was regarded as a major factor for marriage. This finding was similar to the findings from a Kenya study, which showed that the majority of youth disapproved of premarital sex (Ajayi, Leah, Maragu, Miller & Paxman, 1991). As Isarabhakdi (2000) also indicated for Thailand, premarital sex is socially not acceptable for women; marriage still is a form of gaining access to sexual relations. There is a general male

attitude toward premarital sex that it is the man gains from sex and a woman loses from having premarital sex.

6.5 Sexual Behaviors of Respondents Aged 18-24 years old

Sexual activities are more prevalent among the respondents than previously reported. Other research in Lao PDR has reported a wide variation in levels of sexual experience ranging from 8.2 percent to 31.9 percent. The present study indicates that premarital sexual activity among respondents in Vientiane Capital City (34.1 percent) was higher than the national data, which shows 8.2 percent of youth engaged in premarital sex, where late adolescents (20-25 years old) had four times more sexual relations than younger counterparts (17 percent versus 4 percent). The results are similar to a community-based survey of HIV/AIDS knowledge and attitudes among unmarried youth in 2 provinces in the North and 2 provinces in the South, that revealed that 31.9 percent of 260 sampled males and 11.6 percent of 250 sampled females said that they have ever had sex (Lao Red Cross, 2002).

There are some plausible explanations for the high levels of reported sexual behavior from this study. First, this study was carried out in the urban area of the Vientiane Capital City, whereas there are a lot of entertainment places such as bars, discotheques, nightclubs, and pubs. Secondly, there is a possibility that young people engaged in a wider range of sexual behavior such as oral and anal sex than in previous years. Another reason was that this study encompassed adolescents who were somewhat older, and who were therefore more likely to be sexually active than at a younger age. Youth in the FGDs also admitted that sexual activity was likely to happen among for many youth. Large differences in proportion reporting sexual activity between boys and girls were noted in the older sample (57.2 percent versus 23.9 percent). This is different from African countries, where the difference between boys and girls are in the younger samples (mean age 15 years and below) in Tanzania (6.3 percent versus 24 percent) (Klepp, Ndeki, Thuen, et al., 1996), in Kenya (48 percent versus 17 percent) (Kiragu & Zabin, 1993). Findings suggested that the prevalence of sexual activity among Lao youth is much less compared to youth in African countries, United State (Resnick et al.,

1997) and the United Kingdom where the lowest prevalence was 37.5% and the highest was 91 percent (Welling et al., 2001).

The sexual activity in this study included other sexual activities besides heterosexual vaginal intercourse. The study found that heterosexual oral and anal intercourse occurred amongst 9 percent and 1 percent of respondents respectively. Our findings were low compared to studies in African countries where the prevalence of heterosexual oral and anal sex is high; and in some place like in Tanzania, oral sex was the first sexual act for 39 percent of boys and 20 percent of girls and anal sex was the first sexual act for 8 percent and 9 percent respectively (Matasha, Ntembelea, Mayaud et al., 1998). However, most studies in South East Asia have not assessed heterosexual practices other than vaginal intercourse.

It was found that 44.7 percent of male respondents had engaged in premarital sexual activities while 19.2 percent of female respondents reported sexual experience. The difference between men and women was statistically significant. Lao society allows men to have more sexual freedom than women. Socialization imposes constraints on female sexual behavior. Lao traditional values emphasize virginity for females before marriage and the society accepts premarital sex among boys but not for girls. This is similar to the findings of previous studies carried out in Thailand (Isarabhakdi, 2000; Pramualratana, 1992; Abraham & Kumar, 1999).

Males in the FGDs said that men have sex to fulfill their sexual desire and curiosity, to get sexual experience and fall in love; while for girls, the main reason of having sex was affection and being seduced by boys. Again this was similar to findings from Thailand (Isarabhakdi, 2000).

In establishing the extent of sexual activity and the age of that sexual intercourse started, this study examined only heterosexual intercourse and included oral, anal and vaginal intercourse. This information is important to assess the level of risk related to different practices and as well as to design intervention program aimed to decrease high-risk sexual behavior.

6.6 Intimate Relationship and Undesirable Partner's Behavior

The youth engaged in sexual behavior such as dating, holding hands, kissing and necking, petting upper part and lower part of the body. The study found that boys were more likely to be exposed to different types of sexual behaviors (holding hands, kissing and necking, petting lower part) than girls were, while girls are more likely to admit having dated and petting the upper part of the body. Earlier work in Thailand also found that males were more likely to engage in different stages of sexual behaviors than were girls (Isarabhakdi, 2000). It is more socially acceptable in Lao society for male youth, compared to female youth, to experiment with various forms of sexual behavior. Sexually active girls are at risk of being the subject of gossip and their prospects of marriage are jeopardized. The result from the focus group discussions with female respondents revealed that adults disapprove if they see young people going out together as a couple. Adults will gossip about them; however, among young people it is acceptable. Crawford and Popp (2003) suggested that men and women are subject to different rules guiding sexual behaviors. Moral and norms still regulate sexual relations in such ways that women are expected to be virginal and men are initiators of sexual encounters.

The study also revealed that the majority of female partners had behaviors such as smoking, drinking and going during the nighttime compared to the male partner of the female respondents. In Lao culture, males have more freedom to go out to socialize with their friends, thus they were more likely to engage in health risk behaviors such as smoking and drinking. Females are expected to sit home and do housework. Similar results were found in a study of sexual attitudes and experience of rural Thai youth (Isarabhakdi, 2000).

6.7 Age at First Sexual Debut

A small proportion of respondents in the sample had sexual intercourse before age 16 years, with a higher proportion of males than females (4.1 percent versus 1.0 percent). The mean age of first sexual intercourse (18.54 years) for male respondents in this study is similar to that found in a survey of HIV/AIDS/STI knowledge and attitudes among unmarried youth in Lao PDR carried out in 2 Northern and 2 southern provinces

(Australian/Lao Red Cross, 2001) which suggested that the mean age of first sexual intercourse for males was 18.6 years old. However, the mean age at first coitus for female (18.61 years) in this study was higher than that reported from the study carried out by Australian Red Cross (16.9 years) (Australian /Lao Red Cross, 2001).

While findings are disaggregated by sex, the reported mean age of first sexual intercourse was 18.5 among males and 18.6 among females in Lao PDR. Sexually active boys reported an earlier age at onset of sexual activity than do their female counterparts, but the difference was small which was a big gap with the findings of previous studies demonstrating at least a year's difference by sex in the mean age at onset in the majority of studies (Kiragu & Zabin, 1993; Kazule, Mbizvo, Gupta et al., 1997).

Isarabhakdi (2000) found in her study that the mean age of first sexual intercourse was 16.6 for rural Thai males and 17.6 among females. However, the median age of first coitus among Vietnam College students was 20 for both males and females (Vu Quy Nhan, 1996). Thus, the age at initiation of sexual intercourse among Lao females is higher than that of their counterparts in Thailand and African countries (Kiragu & Zabin, 1993) and the United State of America; in contrast, it is much lower than in Vietnam. It may be inferred that the social environment and the cultural values and customs in Lao PDR discourage the initiation of sexual intercourse at young age. In addition, the area of residence (urban versus rural) also helps account for variation in the age at marriage. However, the reported mean 'Age at First Sexual Intercourse' is also influenced by the mean age of the sample as noted in a Uganda sample where the mean age was 14 years and where there was low mean age of first coitus (Staton, Fitzgerald, Li et al., 1999). In this study sample, the mean age of youth was 20.51 and the average onset of sexual activity was 18.5. Nevertheless, this was supported by data on the proportion of sexual active youth in older age groups.

6.8 Condom Use at Last Sexual Intercourse

Condom use among youth has been investigated in several studies. The literature suggests that younger, compared to older adolescents, are less likely to use condom or other contraceptives. Condom use by sexually active youth is alarming irregular and inconsistent (Moore & Rosenthal, 1995).

Findings from this study indicate that condom use was inconsistent and irregular. While 51.7 percent of both male and female youth had ever used a condom when having sex with their regular boy or girlfriend, only 29.3 percent of males and 40 percent of females claimed to practice condom use regularly, and 23.3 percent of boys who visited sex workers never used condoms.

Condom use of this study was higher than that reported in national data, which reports that condom use has increased from 1 percent from the younger populations to 8 percent for the youth. However, findings were consistent with previous studies, which showed inconsistent use of condoms by youth (Smith, de Visser, Akande, Rosenthal & Moore, 1998). As mentioned earlier, condoms were not used with regular partners; however, the literature provided some evidence that suggested that condoms are regularly used in contact with casual partners and sex workers (Rugpao, 1997). This was contradictory by Jenkins et al. (2005) who found that consistent condom use was relatively infrequent with all partner types (8.0 percent with recent steady partners, 28.5 percent with casual partners, and 30.7 percent with sex worker partners).

The majority of female youth in the FGDs said that boys did not like to use condoms because condom use resulted in a lack of feeling, pleasure and was unnatural. This mirrors findings from past research (Havanon, Bennett & Knodel, 1993) In addition, the study also revealed that youth, particularly females, lack interpersonal skills for negotiating condom use. This was exacerbated by personal factors such as low self-esteem and low self-efficacy of condom use and cultural taboos on men and women talking to each other about sexual issues.

The present study found that there was no relationship between condom use and multiple sexual partners. It may be that youth were not aware of condom use or that use depends on the type of partner. Data showed that they use condoms in case of having sex with casual partners and sex workers. Studies of the relationship between condom use and number of partners provided contradictory information. Some authors indicated that condom use is more likely when people have sex with steady friends for less than a month (Laumann et al., 1994). A study in the US among youth aged 15-24 years old showed that women with three or more partners were more likely to use condoms than those with only one partner. However those with 5 or more partners were less likely to report consistent condom use (Potter & Anderson, 1993). The focus group discussion also revealed that youth did not use condoms with their friends; they use condoms only when they have sex with bar girls or sex workers, even if they have multiple sex partners, they do not use condoms.

6.9 Number of Sexual Partners

The study found that males were much more likely to have had multiple sexual partners compared to females. A small percentage of sexually active females (8 percent) had two or more sexual partners. The nature of sexual partners of females and males is different, female tended to have one steady boyfriend; while boys had more than one partner at the same time. Findings from FGDs also revealed a situation where the male has more than one sexual partner because, according to FGD participants, their nature. The findings from this study was consistent with previous studies which found that a large percentages of sexual active youth engaged in sexual relations with more than one partner, however, it may not be comparable due to difference in reference periods. Findings from this study were that that 49.7 percent and 6.0 percent of sexually active males and females respectively admitted having more than one sexual partner during the last six months. Likewise, 43 per cent of secondary male students in the study in Argentina had two or more partners in the six months prior to the survey; while only 15 percent of females had multiple partners (Kornblit, 1993). Similar studies carried out by Buga, Amoko and Ncayiyana (1996) and Kiragu and Zabin (1993) also found large proportions of sexually active males who reported two or more sexual partners.

6.10 Parent-Respondent Connectedness

Findings indicated respondent's perceived closeness and connectedness to parents of the same gender. Male respondents were more likely to be physically and emotionally close to parents; while females were more likely to be satisfied with their relations with their mother than their father. However, the majority of participants in the FGDs said that they did not feel close to parents because parents did not have time to spend with their children and provide material support rather than emotional support. Respondents, irrespective of sex, felt closer to mothers than fathers as they said that mothers did not anger easily and did not punish them. Previous literature also suggested that the relationships between mothers and daughters, fathers and daughters, mothers and sons, and fathers and sons differ. Each of these relationships is important in understanding and promoting parent-child connectedness. For instance, girls generally are more likely to react to difficulties by "internalizing the problem" or being "quiet" – often resulting in depression. Boys, on the other hand, are prone to respond to difficulties by externalizing – acting out, being aggressive, and the like. Mothers and fathers help differently in these situations. Mothers are more typically primary caregivers and tend to spend more time with their children, while fathers are more likely to participate in leisure activities with their children (Paikioff & Brooks-Gunn 1991).

6.11 Parent-Respondent General and Sexual Communication

Overall the parental gender difference is affected by the gender of youth. Mothers communicate more often with daughters than with sons, while fathers rarely communicate with daughters about sex. Youth in the FGDs said that they rarely discussed sex with parents, but rather talked about sex mainly with their peers. They felt shy and afraid to discuss sex with their parents. This is a result of the sensitivity of sexual issues, so youth prefer to talk with friends. When they do discuss sex with their parents, youth preferred to talk with parents of the same sex. This was consistent with the findings of previous studies (Fox & Inazu, 1980; Nolin & Peterson, 1992; DiIorio, Kelly & Hockenberry-Eaton, 1999). Mothers and fathers were involved differently in their children's lives. Fathers were more likely to set the long-term goals, in determining rules and providing discipline and acting as role models. However, mothers acted as the regular contact person with their children and were engaged in

youth's interests and they served as confidants who share experiences with their children. The study found that where there was communication about sex, the content of sexual communication was not in-depth, but rather consisted of warning messages, with parents stressing the negative outcomes of having sex. They generally did not provide general knowledge on sex related information such as sexual and physical development.

6.12 Demographic Factors and Sexual Attitudes and Behaviors

Four outcomes of sexual behavior were examined in this study: 'Ever Had Sex', 'Condom Use' at the last sex, 'Age at Onset of Sexual Intercourse', and 'Number of Sexual Partner'. The discussion of determinants of sexual attitudes and behaviors will be explored according to each outcome variable and the model to be used. As mentioned earlier in the Chapter 3.6 and Chapter 5.9, the analysis used into three Models namely Model A (Demographic characteristic of respondents and their parents), Model B (add parent-respondent relationship) and Model C (add perceived parental expectation, intimate relationship and peer influence, resulting in the Full Model).

6.12.1 Individual Characteristic of Respondents (Socio-demographic characteristic and Feeling towards Family and Sex Education) and their parents

1) Sexual Attitudes

The majority of youth, irrespective of sex, hold positive attitudes towards sex. Respondents, irrespective of sex aged 21-24 had more liberal sexual attitudes than those aged 18-20 (2.83 versus 2.79, p-value .031 for males and 2.7 versus 2.66, p-value.010 for females) in the bi-variate analysis. This result was in accordance with previous studies, which showed that older youth had more liberal attitudes towards premarital sex than did their younger counterparts (Isarabhakdi, 2000; Belgrave, Marin & Chambers, 2000; Leigh et al., 1998). However, in the multivariate analysis, age remained statistically significant as a predictor of sexual attitudes in Models A and B for females, but lost its significance in the Full Model.

The bivariate analysis showed that female respondents currently attending school significantly hold more liberal attitudes compared to those female respondents not attending school. This suggested that youth attending school might come from the better socio-economic strata, had high education and was more likely to expose to change and trends of the new technology and Information and hence might have more liberal sexual attitudes compared to other youth that are not attending school. However, it was not statistically significant after controlling for other confounding variables in the Full Model.

The multivariate analysis indicated that education level of males was significantly related to liberal sexual attitudes. This was probable that they were more likely to expose to different information related to sexuality; thus lead them to hold liberal sexual attitudes.

Family structure is a significant family context in which children grows up and has relations primarily with their parents. Young et al. (1991) found that two parent families provide more guidance and more stable environment, which transmitted more traditional sexual values. This study found that male respondents who lived with their families or relatives were more likely to hold conservative attitudes towards sexuality compared to those respondents living with others at the bivariate analysis. It might be that respondents who lived with parents received more parental supervision and monitoring and parental attitudes and values disapproving of adolescent sex. However, the association between living arrangement and male sexual attitudes was not longer statistically significant in the multivariate analysis after controlling for other confounders.

Concerning to feeling towards family, respondents who felt lonely often were more likely to hold liberal attitudes compared to those respondents who rarely felt lonely. Respondents who were alone tend to find out ways against the more popular consensus and were more likely to rebel against conservative societal norms. Whitbeck, Conger and Kao (1993) found that depression was associated with sexually permissive attitudes and having sexually active friends. However, in the multivariate analysis, feeling lonely lost its significance as a predictor of sexual attitudes for both sexes.

Findings also suggested that girls who felt rarely happy were more likely to have liberal attitudes towards sexuality than those girls who often felt happy (2.80 versus 2.69, p -value $<.001$). This relationship was not significant for males. In Lao society, female youth were more attached to family and more sensitive to the feeling of happiness within the family compared to male youth. Girls who felt unhappiness might have a poor relationship with parents and this might increase peer influence, thus leading to them engaging in premarital sexual activity

Girls who named parents as the main sources of sex education were significantly more likely to have conservative sexual attitudes compared to those respondents who cited friends or media as source of sex education (2.61 versus 2.74, p -value .002). As discussed in the FGDs, parents who provided sex education were likely to stress how sexual behavior before marriage is not consistent with Lao culture, and would caution them about premarital sexual behavior and stress the negative health consequences of having premarital sex. Thus, parents transmitted their values and norms related to sexuality to their children. However, in the multivariate analysis, the main source of sex education was no longer a significant predictor of sexual attitudes.

With respect to demographic characteristics of parents, findings indicated that mothers and fathers who were living in the same house their adolescent male children were likely to have more conservative sexual attitudes (mean scores of 2.79 versus 2.86, p -value.011 for mothers and 2.79 versus 2.86, p -value.014 for fathers) in the bivariate analysis. A possible explanation is that parents could monitor and supervise their children's activities and were more involved in their children's decision making. Thus this could help develop conservative sexual attitudes.

Mother's education had no effect on the sexual attitudes of their adolescent at the level of bivariate analysis. However, in the multivariate analysis mother's education is related to conservative sexual attitudes for males; in contrast for females, it is related to liberal sexual attitudes in the opposite direction of male respondents; but it was significant only in the Model B and marginally significant in the Full Model. It is difficult to interpret this finding. It was probable that mother in the Lao society had

more traditional value regarding sexuality even they have higher education. This finding was in contrast with a previous study which demonstrated that youth with parents who have higher socio-economic status had more permissive attitudes towards sex compared to those who were socio-economically disadvantaged (Bingham, Miller & Adams, 1990).

Other studies, especially those carried out in developed countries, have found statistical relationships between a number of parent's socio-economic characteristics and sexual attitudes (Benda & Corwyn, 1998; Young et al., 1991). In this study most of the relationships were not significant, suggesting that in the Laos context there is limited communication about sexual values between parents and their children and this limits the extent to which parents influence the sexual attitudes of their children.

2) Ever Had Sex

There was a significant relationship between age group and sexual experience for both sexes. Older age, not surprisingly, was associated with a higher likelihood of having had sexual intercourse. As Isarabhakdi (2000) found that sexual activity increased with age among rural Thai youth. School enrollment was also related to sexual experience for both sexes. There are several possible reasons why those adolescents attending school were more likely to have had sex than those not attending school. The school environment, with mixing of males and females, may increase opportunities for sexual behavior. Adolescents still in school also seem to have more social freedom compared to those not in schools. As mentioned in the FGDs, youth go out at the evening time to date and to beer garden instead of studying. Phodhisita and Pattaravanich (1995) carried out a survey among Thai youth and found that both males and females in school were more likely to experience premarital sex than out-of-school youth. In the multivariate analysis, school enrollment for male was statistically significant only in the Individual and Intermediate Models (Models A and B) and lost its significance in the Full Model; while the effect of currently school enrollment for girls remained significant only in the Intermediate Model in the presence of other variables. This suggested that some of the effects of schooling operate through other variables, such as household environment. In Laos, adolescents who are still at school are selected from higher socio-economic strata of society and this is likely related to their sexual behavior.

For females, however, there was a negative association between level education and sexual experience. It might be possible that educational goals reduced the likelihood that young women would engage in a sexual relationship. Under conditions of low educational levels, female youth might judge the negative consequences of sexual activity to be minor relative to its immediate benefits of affection or love. This finding was consistent with previous studies, which demonstrated that youth with lower levels of education were more likely to be sexually experienced compared to youth with a higher level of education (Vanlandingham et al., 1993; Small & Luster, 1994). Eggleston, Jackson and Hardee (1999) also found that youth with low educational achievement and aspiration was more likely to be sexually experienced. In the multivariate analysis, educational attainment level of male and female respondents was not longer significant after controlling for other confounders in the multivariate analysis. This suggested that many of the socio-economic variables operate through other variables to affect sexual experiences. This is consistent with the theoretical model used in this research.

There was a significant bi-variate difference of male youth in reporting ever having had sex by employment status. This finding was similar to that of a previous study that found that there was a significant difference in premarital sex by employment status of youth in Thailand (Isarabhakdi, 2000). This might be due to having more resources and independence to spend leisure time in entertainment and sexual activity. However, there was no statistically significant association between employment's status and 'Ever Had Sex' for female youth. Employment provides resources, which, for men, can improve access to sex. However, for female the use economic resources is not required to engage in sexual activity, as it is men who are expected to pay for entertainment. The employment status of male youth was not addressed in the multivariate analysis due to the multicollinearity of this variable with currently attending school.

Almost one-quarter of female respondents with insufficient income for expenses reported that they were sexually experienced compared to only 16.2 percent who had sufficient income for expenses. The difference was statistically significant. This finding was different from that of Abraham and Kumar (1999) that showed that adolescents

with a higher allowance might have a higher likelihood of being sexual experienced and that personal income was related to sexual experience. However, in a developing country such as Laos, lack of resources may encourage young women to enter sexual relationships. In the multivariate analysis, having sufficient income for expenses for female respondents was not a significant predictor of sexual experience.

Male youth who lived with relatives, alone or with friends were significantly more likely to be sexually experienced than those who lived with their family. There was no significant relationship between living arrangements and sexual experience for females. This finding is similar to those of other studies (Moore et al., 1995). Living arrangement was not a significant predictor in the multivariate analysis.

Findings revealed significant positive correlations between male respondent's feeling lonely and premarital sexual experiences (78.9 percent versus 29.4 percent, p -value $<.001$). It may be that male respondents who had a poor relationship with their family felt lonely and that increases vulnerability to peer influence given peer that support to engage in premarital sex.

In contrast, 15.9 percent of female respondents who often felt very happy were more likely to have sexual experience compared to respondents who sometimes felt happy (13.2 percent). In the multivariate analysis, male respondent's feeling lonely and female respondent's happiness lost their significance as determinant of premarital sexual activity after controlling for other variables; whereas feeling less happy for male respondents was significantly associated with a lower likelihood of having premarital sex compared to those male respondents often feeling happy. In other hand, the literature found evidence only for females, as Whitbeck et al. (1992) suggested that female youth with low quality relationships with parents were more likely to report depression and were more likely to be sexually active than youth with more positive relationship with parents.

The study revealed that 56.4 percent of male respondents who stated that their main source of sex education were parents, were sexually active compared to youth who

named friends (51.6 percent) and schools (34.5 percent). This finding was different with previous studies that found that the main source of sex education for youth was their peers; with parents play a minor role in the sex education of the adult children (Moore & Rosenthal, 1991). Alternative explanations are that boys were more likely to talk with fathers and expressed approval by parents of adolescent sexual activity for males is higher than for daughters. Parents may caution their sons about the negative outcomes of sexual behavior. In spite of the lack of overt communication about sex, sons were far more likely than daughters to perceive liberal parental attitudes to sex. In addition, the findings from focus group discussions found a similar situation. After controlling for other variables, the main source of sex education lost their significance in both sexes.

Regarding parent's background, this study showed that maternal education is inversely related to premarital sexual experiences for female respondents in the bivariate analysis. This may be due to the more important socializing role of mothers on their daughters than on sons. Mothers with high education set up higher achievement for their children and more strictly control their children. Forste and Heaton (1988) and Rossa et al. (1997) found that the higher the level of education completed by parents, the less likely that their teens would be sexually active. In contrast, Whitaker et al. (2000) looked at mothers' education, fathers' education and parents' mean income and found no significant relationship with youth sexual activity. However, Santelli, Lowry, Brener and Robin (2000) found an association between parental educational attainment and ever had sexual intercourse, but they did not differentiate by gender of respondents.

Findings indicated that parent's working status had no effect on youth sexual behavior at the bivariate analysis. When the working status of the mother was included in the multivariate analysis, it was statistically significant for male youth, but not for female. The odds of respondents having sex were 1.865 times higher they had a mother who was working. This finding was in accordance with prior studies carried out in developed countries, which showed that adolescents whose mothers were housewives had rates of first sexual intercourse lower than those adolescents whose mothers worked out-side of the home full-time (Gecas & Selt, 1990).

Male and female youth whose parents were divorced or separated were more likely to admit having premarital sex than youth whose parents were living together, although the relationships were not statistically significant. Similarly Donovan (1995) and Whittaker et al. (2000) also found that living in a single-parent household was not related to teenager's sexual experience. They reported that adolescent development is so strongly determined by others factors (eg. peer pressure) that even two-parent families do not have much influence.

Findings indicated that male respondents whose parents were living in the same house were less likely to be sexually active compared to those youth not living in the same house as their parents. This may be related to more parental monitoring and supervision, and presence of parents in the home. This result was similar to some previous studies (Dittus et al., 1997; Isarabhakdi, 2000), although other studies have found that for females, the two-parent family did not play an important role in influencing sexual behavior (Young et al., 1991; Donovan, 1995). Miller et al. (1999) found that mother's marital status was not related to youth sexual behavior in African American and Latino samples.

3) 'Age at First Sexual Intercourse'

Female respondents with lower levels of education were more likely to experience sex at a younger age than females with higher levels of education. This finding was consistent with previous empirical researches (Resnick et al., 1997, Benda & Corwyn, 1998). The educational background of youth is an important factor determining initiating age at sexual debut, especially for females. This might be because youth were likely to come from poor or middle families that could not afford for higher education. This, in turn, may lead to the higher likelihood of sexual behavior at an early age. Jessor et al. (1993) suggested that low educational achievement and aspirations were associated with early onset of intercourse. When educational level of female respondents was addressed in the multivariate analysis, it was not significant, which supported the argument that the variable operates through such factors as parental influence to affect the age at first sexual intercourse. However, educational level of male respondents became significantly related to 'Age at First Sex' in the Full Model.

The multivariate analysis indicated that male respondents who attended school were related to the late onset of 'Age at First Sex'. This was probable that youth who attending school set up a high goal-oriented. This finding was consistent with previous studies, which found that teenagers who planned to go to university or having a career were less likely to have engaged in sexual activity (Small & Luster, 1994). Youth with high educational attainment level were less likely to engage in sexual experience or initiated their first coitus at later age compared to those youth who have low education, particularly for male youth (Vanlandingham et al., 1993).

Male had first sex at an earlier age than females (mean age of 18.60 versus 18.64, p -value.528). This is probably a result of the cultural norms in Lao society that provide more sexual freedom to male than to female youth. Contrary to previous studies that have found living with single parents is associated with early sexual intercourse in bivariate analysis (Whitbeck et al., 1999) and in complex multivariate models (Upchurch et al., 1999), this study found no relationship between living arrangements and the timing of first sexual intercourse.

The multivariate analysis indicated that male respondents who reported sufficient income were more likely to initiate the first sexual intercourse at early age. This was probable that having enough resources they could afford for entertainment, going to the nigh clubs and socialization with friends. As Isarabhakdi (2000) found that youth who had higher income or having more resources were more likely to engage in premarital sex.

In relation to the feeling lonely and happiness and source of sex education, none of these variables emerged as statistically related with the 'Age at First Sexual Intercourse' among males and females. This finding was in contrast of some earlier work that found youth who report late intercourse debut seemed to be more lonely and isolated than their peers (Bingham & Crockett, 1996).

Studies in a number of countries have found youth from single parent household families tended to have an early onset of sexual intercourse (Newcomer & Udry, 1987;

Dorius & Barber, 1998; Upchurch et al., 1999). Other authors have also suggested that parental Socio-Economic Status (SES) is inversely related to 'Age at First Sexual Intercourse' at the univariate model (Capaldi et al., 1996). However, in this study none of the parental SES variables had a significant relationship with the age at first sexual intercourse, suggesting that the onset of sex is mainly influenced by interpersonal factors rather than structural factors.

4) 'Condom Use at the Last Sexual Intercourse'

Condom use among youth has been investigated in several studies. The literature suggests that younger, compared to older adolescents, are less likely to use condom or other contraceptives. Condom use by sexually active youth is alarming irregular and inconsistent (Moore & Rosenthal, 1995; Eaton, Flisher & Aaro; 2003).

This study found that for the sexually active, about 57.5 percent of male respondents in the older age group had ever used a condom during the last six months; while 54.7 percent of male respondents in younger age group did. This difference is not statistically significant. Although the finding is not consistent with those of studies in other countries (Melchert & Burnett, 1990), the low levels of condom use for both age groups should be a concern.

The study found that there was no effect of school enrollment and level of education on condom use at last sexual intercourse for either male or female respondents. It is usually assumed that education has an important role in influencing condom use, because education is positively associated with knowledge of contraception. The literature on socio-economic status (SES) also suggests that adolescents of low SES are more likely to be poor contraceptors than are adolescents of higher SES (Allgeier & Allgeier, 1991; Magnani, Seiber, Gutierrez & Vereau, 2001). The results from this study suggest that in Laos perhaps education is not imparting the knowledge and skills that are necessary to promote condom use. This indicates the need for better sexual education programs in schools in Laos.

In contrast to the results from previous research (Magnani, Seiber, Gutierrez & Vereau, 2001), this study found no relationship between condom use and other socio-demographic background such as working status and having sufficient income for expenses.

The multivariate analysis indicated that there is a positive relationship between feeling less lonely and condom use. Male respondents who felt less lonely were significantly more likely to report condom use compared to those felt mostly lonely. It is difficult to interpret this result because there was very little research that has addressed this issue.

With respect to the parent's background, the educational attainment of mothers is positively associated with condom use among male respondents in the bi-variate analysis. It may be that more highly educated mothers provided some information on contraception to their sons. However, the relationship was not significant in the multivariate models.

In the multivariate models, having a working mother and mothers living in the same house were significantly related to condom use. Having a working mother was associated with decreased odds of condom use, while the presence of a mother in the same house increased the odds of condom use 48.2 times. Possible explanations include maternal control and monitoring youth's behavior. Miller, Benson and Gallbraith (2001) reviewed studies of parental monitoring and supervision and reported inverse relationships with teen pregnancy risk (including not having sex, delaying sexual debut, having fewer partners, and using contraception) – echoed by subsequent studies (e.g., Romer, Stanton et al., 1999). The researchers noted that the parental presence did not need to occur at a particular time of day; instead overall access to parents and supervision in general seemed to be the significant factor (Blum & Rinehart, 1997). This finding was in accordance with a prior study, which indicated that adolescents who did not live with parents were only 30 percent as likely to have used condom as were boys who lived with both parents (Magnani, Seiber, Gutierrez & Vereau, 2001). In addition, others found that living with single parent was inversely related to use of contraception (Moore et al., 1995; Pick & Palos, 1995).

5) Number of Sexual Partners during the Last Six Months

Among the socio-demographic factors, only respondent's educational level was significantly associated with the number of sexual partners. Respondents with higher levels of education were likely to have fewer sexual partners. However, in the multivariate analysis, education was not a significant predictor of multiple sexual partners.

Male respondents feeling less happy were a significant predictor of the number of sex partners in the multivariate analysis. Male respondents who felt less happy were significantly less likely to report number of sex partners compared to those felt mostly happy. It is difficult to interpret this result because there was very little research that has addressed this issue. Findings also indicated that the odds of respondents who were less happy towards their family had odds of having multiple sex partners that were 75.1 percents lower to than the odds of those feeling mostly happy with their family.

There was no any parent's background variables significantly associated with the odds of having multiple sexual partners during the last six months among both male and female respondents in both bivariate and multivariate analyses. The lack of influence of parent's background suggests that other factors, perhaps cultural factors, have more influence on this aspect of sexual life.

6.13 Parent-Respondent Connectedness and Sexual Attitudes and Behaviors

Numerous studies investigated the relationship between adolescent's sexual behavior and attitudes and family variables found that parent-child closeness is related to adolescent's virginity status and to delay first sexual intercourse (Sieving, McNeely & Blum, 2000), less number of sex partners (Jaccard et al., 1996), and using contraception more consistently (Luster & Small, 1994).

1) Sexual Attitudes

Parental values are more likely to be transmitted in families where there is a lot of interaction among members (Newcomer & Udry, 1984). Family connectedness is also

expected to be related to less risky sexual attitudes. When parents establish the values of their children, young people more often develop positive attitudes about themselves and their sexuality. Miller, Benson and Galbraith (2001) suggested that parent-child connectedness found to be associated to teen's attitudes about having sexual intercourse.

The bivariate analysis indicated that respondents of both sexes who felt high connected to their mothers were less likely to hold liberal sexual attitudes than those who were not well connected with their families. Parental presence and interaction with youth at home provides some protection from permissive sexual attitudes. Our findings were consistent with previous studies (Erin, 2001; Jaccard & Dittus, 1993; Smith, 1997), which have found that parent-child connectedness is less likely related to adolescent's permissive sexual attitudes.

In the multivariate analysis, only father-daughter connectedness remained statistically significant in the intermediate model and marginally significant as a predictor of sexual attitudes in the full model for female respondents after controlling for other confounding variables. This suggests that the effect of father-daughter connectedness on sexual attitudes is indirect through perceived parental expectation regarding sex and receiving peer influence about having sex, which are both positively associated with sexually permissive attitudes.

2) Ever Had Sex

Mother-respondent connectedness is negatively correlated with sexual behaviors. We hypothesized that parent-respondent connectedness would be the strongest predictor of youth sexual activity. Nevertheless, this study found a statistically significant relationship only for females at the bi-variate analysis. This might be due to cultural context of Lao society. Girls would stay with their parents and helped in family work, while boys go to play outside their home and communities. Additionally, in the Lao culture, parents would like girls to care for them when they become older and stay with them, even when the girls are married. In contrast, boys do not stay with parents for long. They will separate when they go to study in other places and when they marry;

they move to stay with their wife. The different family obligations of males and females were discussed on the focus group discussions.

Moreover, the quality of father-respondents connectedness was negatively related to sexual behavior for females, but not for males. Female respondents who felt closer to their fathers were less likely to engage in premarital sexual activity than those who felt lower connectedness. It might be that father-son connectedness was not important in determining sexual behavior of sons because in Lao society young men have high levels of personal freedom, and hence interactions outside the family, and in particular with peers, which are more important than family influences. Fathers also tend to be strict and get angry easily, so the father is often the last resort for male youth to talk to when they have issues related to sexuality. In other words, fathers are more likely to use authoritarian style to supervise and monitoring their children. But fathers are very concerned about their daughters in terms of sexual activity, because of the negative impacts that sexual activities of daughters can have on the family honor.

Many previous studies indicated that close family ties provide an environment of close supervision, monitoring and decreased family stress, which in turn, leads to less sexual activity (Luster & Small, 1994; Jaccard, Dittus & Gordon, 1996; Smith, 1997; Resnick et al., 1997). Adolescents who are close to their parents were more likely to remain sexually abstinent. Makham et al. (2003) found that students in alternative schools who perceived greater family connectedness were significantly less likely than those with lower perceived family connectedness to report that they had ever had sex and had pregnant.

Mother and father-respondent connectedness lost their significance as predictors of ever had sex among both male and female respondents after controlling for other confounding variables in the multivariate analysis. However, father-daughter connectedness was a statistically significant predictor of ever had sex for females in the intermediate model. This suggested that the effect of connectedness with parents in this study is indirect (see discussion in Chapter 5.9.1). This finding partially supports our hypothesis that there is a negative relationship between father and daughter connectedness and 'Ever Had Sex'.

3) Age at First Sexual Intercourse

The parent-respondent connectedness variables were not significantly associated with onset of sexual intercourse in the bivariate analysis; however, the study revealed that father-son connectedness was significantly related to the timing of first sexual debut in multivariate analysis after controlling for other variables. The cross-sectional study of the US National Longitudinal of Adolescent Health found that high parent-youth connectedness, were associated with older age of first sexual intercourse (Resnick et al., 1997). Previous studies demonstrated that mother-child connectedness was significantly related to a delay of first sexual behavior among older boys, but not among older girls (Sieving E, McNeely & Blum R, 2000); in contrast, Miller et al. (1997) found an association between mother-child closeness and late onset of sexual intercourse for daughters. Jaccard, Dittus and Gordon (1998) suggested that mother-teen relationship satisfaction was inversely related to early onset of sexual intercourse.

Overall, this finding partially supports our hypothesis that there is a negative relationship between father-son connectedness and onset of sexual debut. Most of studies found the effect of mother-daughter closeness on adolescent sexual activity rather than father-son closeness.

4) Condom Use at the Last Sexual Intercourse (Six Months Preceding the Survey)

The results from the study failed to support the hypothesis that parent-respondent connectedness was significantly related to condom use among sexually active respondents in both the bivariate and multivariate analyses. It is possible that youth who engaged in premarital sexual experiences were not always aware of condoms. Previous studies showed that youth were likely not to use condoms, or use inconsistently (Smith, 1997; Karim, Margnani, Morgan & Bond, 2003). Luster and Small (1994) and Chewing and Koningsveld (1998), also found that there was no effect of parental support on using contraception for both males and females. Condom use is related more to condom behavior, which is a relationship specific behavior and changes over the course of a relationship. It is probable that youth may be ignorant about the need for condoms, or they might lack the skills to use condoms, or be

embarrassed about asking for condoms. In addition, youth who engaged in premarital sex were not always aware of condoms. The participants in the FGDs mentioned that they did not discuss about condom use before having sex. Girls in particular did not have the power to negotiate condom use with boys.

However, some studies found that quality of mother-teen relationship was positively related to consistent contraceptive use among sexually active teens (Jaccard et al., 1996). Crosby et al. (2002) also found that a supportive family environment increased condom use and confidence in negotiating condom use and that this effect held independent of monitoring and parent-child communication.

5) Number of Sexual Partners during the Six Months Prior the Survey

The bivariate analysis indicated that there was no statistically significant relationship between levels of connectedness between parent and respondents and the number of sexual partners. This finding was consistent with previous studies, which suggested that closeness or connectedness to the family is related to fewer sex partners (Miller, Sabo, Farrell, Barnes & Melnick, 1998). Feldman and Brown (1993) found that the quality of parent-child relations and positive child rearing practices were inversely related to a son's number of sexual partners 4 years later.

However, Luster and Small (1994) and Erin (2001) found, that there was no effect of mother-respondent closeness on the number of sexual partners for either boys or girls. It might be that even parents and children who have connectedness, lack parental supervision or monitoring, thus youth might be influenced more in their behavior by peers, resulting in increased sexual risk behavior, including multiple sex partners. If parents provided sufficient supervision and monitoring for their youth, youth who feel less connected to parent will find a means around parental supervision.

The multivariate analysis indicated that mother-respondent connectedness became statistically significant as predictor of multiple sexual partners among male respondents after controlling for other confounding variables. This finding was consistent with previous studies, which found that adolescents with closeness with parents have fewer partners (Feldman & Brown, 1993; Jaccard et al., 1996)

The study partially supported our hypothesis that there was a correlation between parent-respondent connectedness and sexual attitudes and behaviors (number of sex partners and age at first sexual intercourse). There are two plausible explanations of the conflicting results. First, the family in the Lao culture is traditionally very close. Secondly, survey items used in this study to measure connectedness were adapted from Western countries, and these items might have been less appropriate for a South East Asian context to capture crucial aspects of connectedness between parents and children. The scale used to measure connectedness was a Likert 5-point scale, and respondents tended to reply at the middle point of the scale (uncertain). In addition, the meaning of connectedness for male and female might be interpreted differently, thus it could lead to bias in comparing the two groups.

6.14 Parent-Respondent General and Sexual Communication and Respondent's Sexual Attitudes and Behaviors

1) Sexual Attitudes

Mother-respondent general communication of both sexes and father-daughter general communications were significantly related to conservative 'Sexual Attitudes' at the bivariate analysis. Mother-son general communication remained statistically significant as a predictor of sexual attitudes in the multivariate analysis, while for females, mother general communication was significant only in the intermediate model. When parents affirmed their values through communication with their children, young people more often develop positive healthy attitude about themselves; whereas positive communication between parents and children helps them to establish individual values and make sexual healthy decisions (Advocates for youth, 2005). Troth and Peterson (2001) argue that parent-child communication is important as a positive factor in the child's willingness to discuss safe sex and consistent condom use.

Perceived father-respondent sexual communication was related to liberal sexual attitudes for males, but not for females in the bivariate and multivariate analyses. Fathers are more likely to accept premarital sexual behaviors of sons than their daughters. Other studies have noted that adolescents who reported discussing a greater number of sex-related topics with mothers were less likely to express conservative

sexual attitudes than respondents who reported fewer discussions. Other significant relationships between father-respondent discussed about sexual issues and sexual attitudes were not observed (Diorio, Kelley & Hockenberry-Eaton, 1999).

2) Ever Had Sex

Miller (1999) found that general communication could be serving as a proxy for the overall quality of parent-youth relationship and would be a better predictor of adolescent sexual behavior than whether or not specific sexual topics are discussed. Good general communication creates a good relationship that builds trust and confidentiality between parents and children, and thus might be lead to discussion of sexual matters, which are more private and sensitive.

The study found that the higher the level of communication on general issues between mothers, fathers and lower the odds of having had sex for females at the bivariate analysis. Positive communication might foster identification with parental values and may reduce the probability of engaging in sexual activity. This might be due to female youth being more likely to communicate with parents and being more likely to receive information compared to male youth. Another reason was that parents were more concerned about their daughter's sexual behavior more than their son's sexual behavior.

In the multivariate analysis, only mother-daughter general communication remained statistically significant in the intermediary mode and it was not significant as a determinant of ever had sex among females in the Full Model. The results suggested that the effect of communication with mothers on respondent sexual experience is indirect as well as the indirect effect of father-daughter connectedness (see Chapter 5.9.1). As Weinstein and Thorton (1989) and Jaccard, Dittus and Gordon (1996) note, the benefits of communication between parents and adolescents depends on both parental values and the closeness between parents and adolescents. Without a close attachment, whatever information provided stands less of a chance of being accurately perceived, accepted, and acted upon.

There was no correlation between parent-respondent sexual communication and ever had sex in both the bivariate and multivariate analyses. This may be because the level of sexual communication between male and female respondents and mothers and fathers was very low. In the FGDs most participants reported that they feel shy or embarrassed when discussing sexual matters with parents. Some respondents argued that parents did not discuss sexual matters with them because their parents believe them and trust that they are not sexually active and did not have any high-risk sexual behavior. Usually when discussing sexual matters with parents, they talked indirectly with their parents and referred to their friend's cases.

Alternatively, parents think that their children will learn about sex education by themselves when they are growing up and they gave the responsibility to the schools. It appears that parents also feel shy and find it difficult to explain sexual matters to their children and they do not know how to express themselves in these areas. They feel that they lack knowledge, are embarrassed by the topic, and often have misperceptions about their adolescent's behavior. When sexual communication does occur, it usually comes in the form of cautionary messages when parents suspect that their children are sexually active. The majority of participants in the FGDs mentioned that if there were more discussion, the risk behaviors of youth would be reduced. The content of parent-respondent sexual communication tended to focus more on the negative outcomes of having sex, particularly for girls, and less on what youth should know about their physical growth and sexual development.

As mentioned earlier, parent-teen communication about sexual issues does not have a uniform or consistent effect on adolescent pregnancy. Newcomer and Udry (1985) and Yarber and Greer (1986) found that parent-youth sexual communication exerts more influence on the sexual attitudes and behaviors of unmarried females than males. In contrast, Hovell et al. (1994) and Rodgers (1999) found that the amount of parent-adolescent sexual communication was not related to adolescent intercourse experience. Some studies report effects that are in the opposite direction that those expected from theory, where the amount of parent-youth communication about sexual issues is related to youth being more likely to have had sexual intercourse (Widmer, 1997).

3) Age at First Sex

Only mother-son communications on sexual matters was associated with the late onset of first sexual debut in bivariate analysis. It is probable that male respondents felt more comfortable to talk about sexual matters with parents. FGDs confirmed this finding. The results are consistent with previous studies that found that adolescents who communicate with parents about sexual issues were more likely to delay sexual intercourse (Miller, Forehand & Kotchickl, 1999; Pick & Palos, 1995).

However, in the multivariate analysis there was a reversal in the direction of the effect of mother-son sexual communication. Male respondents who reported high-level communication with mothers about sexual issues were more likely to initiate the onset of first sexual debut at an earlier age. There was a confounding relationship between mother-son communication on sexual matters and mother-son communication about when to initiate sex, and this may contribute to the reversal. Another reason was that the relationship between parent-child communication and initiation of sexual intercourse might be mediated by parent's values. If a mother holds a permissive attitude, parent-child communication about sex is related to engaging in premarital sex at early age. This finding was opposite to other findings that demonstrated that open, positive and frequent parent-child discussion about sex were associated with the delay onset of sexual intercourse (Miller, Forehand & Kotchick, 1999). However, some studies have found that parent-child communication about sex was not related to timing of sexual intercourse (Chewning & Koningsveld, 1998). Other authors found there was opposition direction of theory that is the parent-youth sexual discussion is related to youth being more likely to have had sexual intercourse (Widmer, 1997).

Discussion by mothers and their children about when to start having sex was statistically related to an older age of first sexual intercourse. This finding suggested that it is not just communication about sexual issues, but rather the communication content that is more important in predicting the onset of sexual debut. Besides communication content, the frequency and quality of parent-child relationship also vary greatly.

4) Condom Use

Parent-youth communication on general issues and on sexual matters was not significantly related with condom use at last sexual intercourse. Previous studies indicated that youth whose parents talked to them about sex tended to be less sexually active and were more likely to use effective means of contraception. However, in this study the majority of respondents in the FGDs and questionnaire survey confirmed that they did not talk with their parents about sex. Thus the results highlight the importance of discussing condom use for youth. Family instructions for female youth often are in the form of moral interactions and cautions about the negative consequences of having premarital sex. So they might not obtain any information about sexual development, their bodies, conception, and contraception.

The study revealed that among sexually active youth, discussion about sexual topics with mothers and fathers did not extend to condom use in the bivariate analysis. Although discussion on sexual topics may lead to increased knowledge of reproductive health and contraception, this does not always lead to the practice of condom use. Parent-child communication is complex and mediated by many factors, namely the frequency and specificity of communication, the quality and nature of communication, the context and timing of communication, triggers and values (Miller, Benson and Galbraith, 2001). In this study, however, we did not measure the timing and quality of communication. We only examined the frequency of parent-youth sexual communication in general. Previous studies found that there was no association between parent-youth communication and youth sexual and contraceptive behaviors (Casper, 1990; Chewning & Koningsvel, 1998; Christopher et al., 1993; Rodgers, 1999).

Nevertheless, in the Full Model of multivariate analysis, father-son discussion about sexual topics was less likely related to condom use. This could be explained that the discussion is not specific on condom; however, it is more on general issues of sexuality such as the health consequence of having sex. The focus group discussion also indicated that most parents emphasized on the delinquent behaviors and not going out during the night-time. They did not talk about condoms or contraceptives. Previous

researches found inconsistency result as mentioned in the Chapter II. Some authors found a positive association between parent-child discussion about sexual matters and condom use (Whitaker et al., 1999).

When the analysis is disaggregated to examine discussions about birth control and condom, in the bivariate analysis there was a positive association between communication about condom with fathers and condom use among sexually active males (p -value.030), but not for females. In the multivariate analysis, father's discussion about condom with sons, and father's discussion about birth control with sons were significantly related to condom use. This might be due to sexually active male youth being more likely to talk with fathers about condom use and fathers advising them to use contraception for protection from HIV/AIDS and Sexually Transmitted Diseases, and unwanted pregnancies. Sexually active females may not talk with their parents because they feel uncomfortable discussing sexual matters, including condom use with family members for fear of being seen to be sexually active. Secondly, in the case of condom use, it is seen by both males and females they the primary responsibility for condom use lies with the male. So females may be less likely to report condom use than are males. Several studies have demonstrated that parent-youth communication about condom use is related to a higher likelihood of condom use (Jaccard, Dittus & Gordon, 1996; Miller, Levin & Whittaker, 1998; Miller, Kotchick, Dorsey, Forehand & Harth, 1998; Perkins, Calabrese & Joseph, 2001).

Moreover, in the multivariate analysis, mother's discussions about birth control and father's discussion about sexual issues with sons were inversely associated with condom use. Possible explanations include unease are discussing condoms, lack of specific communication on condom use, and non-favorable attitudes towards condom use and contraceptive behaviors. For instance, discussion with mothers about birth control or discussions with fathers about sexual issues might lead to having knowledge on birth control and sexual issues, but does not necessarily relate to more favorable attitudes about using condoms and contraceptives. The other reason might be parent's attitudes towards sexuality. If parents hold conservative sexual attitudes, this leads to a lower likelihood of condom use. Jaccard and Dittus (1993) found that parent's values

are highly related to the sexual behavior and contraceptive behavior of youth. Whittaker et al. (1999) also suggested that maternal-teen sexual communication related to higher teen condom use when a mother is open and responsive, but the relation is reversed when mothers are not seen as responsive.

It is interesting to note that the present study found that parents generally did not talk about birth control and condoms with their adult children, either boys or girls. This was supported from findings from the FGDs. This suggests that efforts should be made to promote discussion between parents and youth on birth control and condom use in order to provide knowledge to youth to help them protect themselves from unsafe sex.

5) Number of Sexual Partners

There was a positive association between mother-respondent sexual communication and having had multiple sexual partners for males, but not for females, in both the bivariate and multivariate analyses. It may be that there is a problem of temporal ordering in this relationship, with parental suspicion of sexual activity of their children leading to greater communication on sexual issues. Thus, higher levels of parental communication could be statistically, although not causally, related to an increased likelihood of adolescent intercourse and having multiple sex partners. Additionally, the quality of parent-youth communication, particularly the ability of parents to communicate with their children is an important factor, which has been found to have an influence of the direction of association between parent-youth sexual communication and youth's sexual behavior (Widmer, 1997).

However, the study revealed an opposite direction for father-son sexual communication compared with mother-son sexual communication. There was a negative correlation between father-son sexual communication and multiple sexual partners. This suggested that male respondents who communicated with fathers about sexual matters were less likely to have multiple sex partners. This was probable that fathers were more likely to talk to their sons and have more influence on their sons than daughters. The FGDs also revealed that mothers communicate more often with daughters than with sons, while fathers communicate more with sons about sex than daughters. This finding was in

accordance with past research, which suggested that positive and frequent parent-youth sexual communication about sex is associated with youth not having sexual intercourse and having fewer sex partners (Miller, Forehand & Kotchick, 1999).

The result of this study on parent-child communication and sexual behaviors was complex and mixed. Overall, parent-respondent general communication was a proxy determinant of sexual attitudes and behaviors of the whole picture. More specific communication is more significantly related to other outcome variables such as age at first sex, condom use, number of sex partners. Findings from this study partially support the hypothesis that there was a negative relationship between parent-respondent sexual communication and sexual attitudes and behaviors. It might be that the measure of sexual communication was more crude, the sexual communication consisted of 5 dimensions as mentioned in the Chapter II. This study measured only the frequency and the number of topics that they discussed. Other elements of sexual communication such as the style in which information was given, the timing of the communication and the general family environment were not capturing; thus it might lead to the mixed findings.

6.15 Perceived Parental Expectation Regarding Sexuality and Sexual Attitudes and Behaviors

1) Sexual Attitudes

The study revealed that for sons there was an inverse relationship between perceived maternal expectations regarding sex and sexual attitudes in the bivariate analysis, whereas for daughter, only perceived mother disapproval of premarital sex was significantly associated with sexual attitudes in the multivariate analysis. Youth who perceived maternal and paternal disapproval of sex generally had more conservative sexual attitudes. This finding was similar with prior research which found that parental attitudes toward premarital sex were predictive of adolescent premarital sexual attitudes, which were in turn related to adolescent sexual behavior (Jaccard, 1996)

2) Ever Had Sex

Teen perceptions of maternal and paternal disapproval of premarital sex were associated with lower level of sexual activity for both males and females in the bivariate analysis. This finding supported our hypothesis that youth who perceived higher parental expectation regarding sexuality were less likely to be sexually experienced. It should be noted that it is not the priority that youth accurately perceived their mothers attitudes or expectation towards sexuality, rather, it is the teen perception of the mother's position, disapproval of having sex, which is predictive of youth behaviors (Jaccard & Dittus, 1991; Jaccard, Dittus & Gordon, 1998). This finding was in accordance with previous studies (Sieving, McNeely & Blum, 2000; Jaccard, Dittus & Gordon, 1998).

In the multivariate analysis, perceptions of maternal and paternal disapproval of premarital sex were not significance predictors of ever having had sex among males and females.

3) Age at First Sexual Intercourse

Our findings failed to support the hypothesis that perceived parental expectation are significantly related to a delay in first sexual debut. This finding was in contrast with the study carried out by Sieving, McNeely and Blum (2000), which found that youth who perceived strong maternal disapproval of sex, initiated sexual intercourse later than those who did not perceive strong disapproval. As argued by Baumrind (1989) it may be that perceived parental expectations regarding to sex have not extended to the age of sexual initiation. Parental disapproval is most likely to be accurately perceived within the context of a supportive and caring mother-child relationship and may illustrate a mechanism of authoritative parenting.

4) Condom Use

Strongly perceived parents disapproval of premarital sex was not associated with condom use for both males and females. It is probable that once youth engaged in sex, parental explanations about sexual behavior did not extend to condom use. Most parents when discussing issues of sex with children seem to stress the importance of not

having sex, rather than condom use during sex. Therefore there may have been no expectations communicated about condom use.

However, Jaccard, Dittus and Gordon (1998) also suggested that adolescent's perceptions of maternal disapproval of premarital sex was significantly related to more consistent use of contraceptives among sexually active youths in the United States.

5) Number of Sexual Partners

Bivariate findings showed that youth who perceived their mothers and fathers strongly disapproving of them having sex were less likely to report having had multiple sexual partners compared to those youth who perceived that their parents approved of premarital sex. The result of this study was in accordance with previous studies that found that perceived parental strong disapproval of premarital sex was negatively associated with multiple sexual partners (Jaccard, Dittus & Gordon, 1996; Dittus, Jaccard & Gordon, 1997).

In the multivariate analysis, perceived parental expectation regarding sexuality was not significant, therefore failing to support our hypothesis that respondents of both sexes who perceived that parents strongly disapproved of premarital sex were less likely to engage in sexual activity and have fewer partners.

Perceived parental disapproval of sex was associated with conservative sexual attitudes; however, it was not significantly related to other outcome variables of sexual behaviors such as 'Ever Had sex', 'Age at First Sexual Intercourse', 'Condom Use at the Last Sexual Intercourse' and 'Number of Sex Partners'. Although these findings are in contrast with some earlier work that found perceived parental disapproval of premarital sex reduced the likelihood of sexual activity (Jaccard, Dittus & Gordon, 1996), the results from this study partially supported the proposition that there is a relationship between perceived parental expectations regarding sexuality and sexual attitudes. As discussed by Dittus and Jaccard (2000), adolescents may misperceive the attitudes of their parents, thus communication between parents and youth should be reinforced.

Overall, perceived parental expectation regarding sexuality was not the significant predictor of sexual attitudes and behaviors. This study was not measured the actual parent's values or attitudes regarding towards sexuality; however the literatures suggested that perceived parental attitude regarding sex was more valid predictor of sexual behavior than actual parent's attitudes regarding sex. In addition, the measure of perceived parental expectation regarding sex is more general on sexual behaviors and lacks of specific perceived expectation towards condom use, age at first sexual behavior and number of sex partners. The scale used to measure perceived parental expectation regarding sexuality was Likert scale with 5 point scale, the respondents tended to answer at the middle scale with uncertain, thus could lead to response bias.

6.16 Intimate Relationships

1) Sexual Attitudes

Respondents of both sexes who experienced all different stages of sexual behaviors such as dating; kissing and necking, and petting the upper part and lower parts of the body were more likely to hold more permissive attitudes towards sexuality than their counterparts who did not experience the different stages of sexual behaviors. However, only dating retained its significance as predictor of sexual attitudes among girls in the multivariate analysis. This finding is consistent with past research that found a strong correlation between dating and teenage sexual attitudes and behaviors. Early dating is associated with more liberal attitudes to premarital sex. Miller et al. (1986) found that 82 percent of teenagers who had begun dating at age 12 had experienced intercourse by late adolescence.

2) Ever Had Sex

The study revealed that about half of respondents experienced different stage of sexual behaviors. Respondents regardless of gender who were exposed to different stages of sexual behaviors such as (dating, holding hands, kissing, and petting upper and lower part of the body) were significantly more likely to have sexual experience than were respondents who had not been exposed to different stages of sexual behaviors. Muuss's suggested that sexual activity progressed from the least to the most intimate. This could start with dating, touching each other body, kissing and petting and could be lead to

sexual intercourse. Similarly, a study carried out among Thai youth showed that dating and staying alone with the opposite sex and touching each other's body were associated with having premarital sex (Pusanasuwan Sri, 1999). As Moore and Rosenthal (1993) suggested, that youth who have a steady partner are more likely to admit premarital sex than are casual daters.

There is a possibility that different stages of sexual behavior are not plausibly a determinant of ever having had sex, but might instead be view as an associated consequence of sexual behavior. One should note that the most consistent predictor of coital sex is precoital sex. The progression from more innocent forms of sex namely kissing and petting to coital sex follows a highly predictive pattern (Jakobsen, 1997). Holding hands was not included in the multivariate analysis, but that made no appreciable difference to the results.

In the multivariate analysis, dating, kissing, petting upper part and lower part of the body were statistically significant for male respondent, while for female, kissing was still significant.

3) 'Age at First Sexual Intercourse'

Findings indicated no effect of intimate relationships on the age at first sexual intercourse in both bivariate and multivariate analyses. This study did not look at the age of respondents engaging in intimate relationship such as dating, kissing and petting upper part and lower part of the body.

4) Condom Use at the Last Sexual Intercourse

Findings indicated that the intimate relationship and different stages of sexual behavior has no effect on condom use at the last sexual intercourse in both bivariate and multivariate analyses.

Several factors of intimate relationship and partner's behavior were correlated with being sexually active, but were not significantly associated with condom use at the last sexual intercourse. This could be explained that premarital sex does not always lead to

safe sex behavior. The decision-making process involves a complex interaction of individual, social, family and peer factors. Condom use is often explained by the health belief model, which emphasized on the perceived costs and benefits of use, an assessment of threat, norms perceived, willingness and self-efficacy (Gage, 1998). The other reason for non-use of condoms might be that youth believe that condoms are not natural and result in a loss of pleasure and sensation. Additionally, the use of condoms indicates low esteem for the female partner. Some girls mentioned that if their partners wanted to use a condom with them, it means that their lovers did not trust them, which is supported by our qualitative data which demonstrates that youth were more likely to use condoms with sex workers rather than regular partners or boy/girl friends. Lastly, condom use is planned sex; however, the literature suggested that adolescent sex is unplanned; thus could be explained that why adolescents did not used condom.

5) Number of Sexual Partners

Respondents who reported they had a number of boy/girl friends were more likely to have multiple sexual partners compared with those youth who had fewer friends. However, when the association was tested, it was found that there was a significant difference only for males, but not for females (p-value.039 for males and p-value.888 for females respectively). The plausible explanation might be that male respondents have more girl friends to socialize and meet together, thus lead them to engage in sexual activities with multiple sex partners. In addition, boys' having multiple sex partners are socially accepted within the Lao society while, as out FGDs indicate, is considered very inappropriate for girls to have multiple sex partners.

Male respondents who reported petting the lower part of the body were more likely to have multiple sexual partners compared with those who had not engaged in petting lower part of the body ($p = 0.030$), but not for females.

6.17 Peer Influences and Partner's Behavior

1) Sexual Attitudes

Peer influence has an effect on the sexual attitudes of both male and female respondents. There was a positive association between peer influences to go out with friends, encouraging them to have sex, and wanted to have sex and liberal sexual attitudes. In addition, female respondents who received peer influences to have a relationship with boyfriends were likely to have more permissive sexual attitudes. In the multivariate analysis, peer influences encouraging dating remained a significant predictor of sexual attitudes among male respondents; whereas peer influence having sex retained its significance for females after controlling for other variables. The results, therefore, suggested that peer influences are important in shaping sexual attitudes. Moore & Rosenthal (1993) suggested that the operation of peer influence on behavior passes through the transmission of attitudes. Perceived attitudes and values of peers have an important influence on the intention to engage in sexual behavior.

Findings indicated that partner's behavior such as drinking, smoking and going out during the nighttime were associated with liberal sexual attitudes for male respondent's partner, but not for female respondent's partner; however, there was a gender difference. It might be that in Lao culture females were less likely to drink and smoke compared to male youth. As mentioned earlier, the partner's behavior variables were not included in the multivariate analysis due to few data (only respondent who have friends or partners were asked about their partner's behavior).

2) Ever Having Had Sex

Respondents, irrespective of sex, who had been influenced by peers to go out with friends, to have sex, or whose peers had indicated a desire to have sex, were more likely to be sexually experienced compared to those who did not receive any influence from peers. In the multivariate analysis, peer influence to dating, encouraged them to have sex or indicated the desire to have sex with youth lost their significance in the male models. For female respondents, currently having friends, peer influences to have steady friends were statistically significant and peer influence to have sex also remained statistically associated with ever having had sex. Peer influence to have sex

and currently having friends encourage sex are and peer influence to have steady friends were predictive factor of ever having had sex.

Peer influence is often cited as one of the most important influences on youth sexual behavior. An individual's perception of what their peers are doing has a greater influence over sexual behavior than peer's actual behavior (Brooks-Gunn & Furstenberg, 1989). Empirical literature suggests that adolescence is a period of time when peers or friends have more influence on their behaviors than parents. Friends are very important and they trust their peers and turn to friends when they have problems. Adolescence is the period of romantic and sexual exploration. Thus being accepted by peer groups is very important for youth. Isarabhakdi (2000) reported that peer influence was one of the main motivations for male youth in engaging in their first sexual intercourse. Burack (1999) also indicated that 20 percent of students aged 13 years engaged in premarital sex after feeling peer pressure.

Drinking alcohol is a health-risk behavior of youth. Problems of sexual behavior as result of drinking may arise because alcohol and other drugs may enhance sexual desire and are often associated with sexual intercourse. The present study noted that male and female respondents who reported that their partner were drinkers were more likely to be sexually active compared to those respondent's whose partners were not drinkers (30.6 percent versus 4.1 percent, $p\text{-value} < .001$). This finding was consistent with that of Fergusson and Lynskey (1996), who found that youth who reported misusing alcohol had odds of early sexual activity that were 6.1 to 23.0 times higher than those of young people who did not misuse alcohol. Withbeck et al. (1999) found that adolescents who had used alcohol were two times more likely to experience sexual intercourse than those who had not.

With respect to the smoking, there was a significant relationship between female respondent partner's smoking and sexual behavior, but not for male respondent's partner. Slightly less than half of female respondent's partners (47.9 percent) who smoked had engaged in sexual behavior while less than one fifth of female youth whose partner (18.8 percent) had never smoked admitted ever having sex. In part this reflects

that in Laos, males were much more likely than females to smoke. But it also reflects the cultural context where smoking has a meaning of rebelliousness, especially for females, and loose moral character.

Smoking can be a starting point, which leads to drug abuse or other serious misconduct, as well as arouse smoker's sexual desires. This finding was in accordance with current researches (Busen, Modeland & Kouzekanani, 2000; Lam & Stewart, 2001). Similarly Parrillo et al. (1997) also found that early initiation of sexual intercourse was relating to smoking at early age and early onset of alcohol use.

3) 'Age at First Sexual Intercourse'

Female respondents whose boyfriend encouraged them to have sex were significantly more likely to initiate their first sexual intercourse at an early age compared to girls who did not received influence from peers. When peer influence variables were addressed in the multivariate analysis, it was not a significant determinant of sexual initiation among male respondents. However, peers encouraging sex remained a significant predictor of the timing of first sexual intercourse among females. Research carried out by Kinsman, Romers, Furstenberg and Schwarz (1998) among school student in Philadelphia noted the strongest predictor of high intention to early sexual initiation is belief that most friends already were sexually active. Other researcher has found peer group influences on male sexual behavior (Vanlangdingham et al., 1993).

4) Condom Use at Last Sexual Intercourse

Findings indicated that there was only an association between peer influence to have relationships with a boyfriend and condom use among female sexually active respondents at the bi-variate analysis. This might be due to female youth being more concerned and responsible for protecting themselves from negative consequences of having sex such as unwanted pregnancy and sexually transmitted infections, while male youth neglect or ignore the negative consequence of having sex.

However, peer's influence to have relationships with a boyfriend among female respondents was not included in the multivariate analysis due to a small sample size of

condom user among female respondents. None of the peer influence variables emerged as significant predictors in the multivariate analysis.

It seemed that there is a gender difference in the influence of peers. More and Rosenthal (1995) suggested that the use of contraception and safe sex practices were influenced by peer attitudes for females, but not for males.

5) Number of Sexual Partners during the Last Six Months

Among peer influence factors, there was no factor associated with number of sexual partners in the bi-variate analysis; nevertheless, in the multivariate analysis, peer influence on dating among male respondents was significantly associated with multiple sexual partners. A study suggested that male and female youth in Kenya who socialized with sexually experienced peers were respectively nearly seven and three times as likely as those peers whose were not sexually active (Kiragu & Zabin, 1993).

6.18 Relationship Between Sexual Attitudes and Sexual Behaviors

As hypothesized, respondents who were sexually experienced had more liberal sexual attitudes than their counterparts who were not sexually active. When the relation was tested, it was found that there was a statically significant association between attitudes toward sexuality and sexual behavior at the level of $<.05$ in the bivariate analysis. Sexual attitudes are hypothesized to influence sexual behaviors. As discussed by Fiske and Taylor (1991), an association between sexual attitudes and behaviors is likely to take place when the specificity of behaviors and attitudes match and when the attitudes are important.

6.19 Sexual Risk Behavior

Only a small proportion of respondents reported potentially high-risk sexual behaviors, including multiple partnerships and unprotected sexual intercourse. About one third of the respondents reported that they ever engaged in sexual activity with a higher proportion of males than females being sexually active (44.7 percent versus 19.2 percent), having multiple sexual partners (49.7 percent versus 6 percent of the sexually experienced respondents) and inconsistent use of condoms. Among sexually active

respondents, a small proportion of males and females reported they initiated their first sexual intercourse before 16 (4.1 percent versus 1 percent). Boys were more likely to be exposed to different types of sexual behaviors (holding hands, kissing and necking, petting lower part) than girls were; while girls were more likely to admit having dated and petting the upper part of the body. Overall, a higher proportion of boys than girls were at high-risk sexual behaviors of being infected with STIs and HIV/AIDS. Girls were more likely to be exposed to risk through the activities of their boyfriends.

6.20 Summary

According to the conceptual framework, the socio-demographic characteristic of respondents and parents has a direct influence on the outcome variables such as sexual attitudes and behaviors. However, although there was some relationship between socio-demographic characteristics of boys and sexual attitudes and behaviors, no such relationship existed for girls. This suggested that there are other factors influencing sexual attitudes and behaviors of female youths than socio-demographic characteristic of respondents and their parents. This might be that female youth were more influenced by other factors such as peer influences and partner's behaviors and intimate relationship.

The model also postulated that parent-youth connectedness and communication had a direct influence on the youth's sexual attitudes and behaviors. This was confirmed by the results. However, the effects varied between males and females and for mothers and fathers. The effects were generally greater for males than females and for same sex relationships (i.e. father-son and mother daughter. For instance, the effect of connectedness between father-son and mother-daughter general communication was mediated by peer influence and intimate relationship such as kissing in the multivariate analysis; it suggested that the effect of connectedness and general communication on female youth's sexual attitudes and behaviors is indirect. The effect of parent-youth connectedness and general communication was strong in the bivariate analysis and was significant in the Model B, but lost their significance in the multivariate analysis.

The findings also supported the predictions of the model that there was a relationship between sexual attitudes and behaviors. The sexual attitudes are reflected their sexual behaviors.

Overall, the findings supported there was a relationship between socio-demographic characteristic of youth, parents, parent-youth interaction, peer influence and partner's behavior and intimate relationship which were driven from conceptual framework.

The model was more appropriate to explain the variation of male sexual behaviors than female; whereas it was more fitted to explain female sexual attitudes than male. Overall, the model is fitted better for sexual attitudes than sexual behaviors. The models of this conceptual framework could not explain all the variation of male's condom use and number of sex partners and female sexual behaviors, particularly age at first sex significantly. Hence, the specific determinants of condom use and number of sex partners should be included in the conceptual framework. This could be explained that the model did not take into account all the antecedent factors that affecting youth's sexual attitudes and behaviors. The other reason was that factors influencing school and out-of-school youth's sexual attitudes might be different due to different environment.