

ORIGINAL ARTICLE

Exploring factors influencing attitudes toward premarital sex among Thai adolescents: a quantitative analysis

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ABSTRACT

In Thai society, teenagers having sex before marriage is often avoided as it is considered forbidden. Nonetheless, it is widely believed that young people are becoming more sexually active before marriage. This study aimed to determine factors associated with attitudes toward premarital sex among Thai adolescents. Secondary data was used and drawn from the 2011 Survey on Conditions of Society and Culture by the National Statistical Office Thailand. The total study population was 674 Thai adolescents, comprising 364 younger adolescents aged 13–16 and 310 older adolescents aged 17–19. Three-quarters of the sample were school-going students. The analysis used Pearson chi-square and binary logistic regression. The results found that age, gender, education status, and acceptance toward sexual behaviors had a significant association with attitude toward premarital sex with those under 15 years old ($p < .05$). The probability of agreement with premarital sex was highly associated with the acceptance of open sexual behavior. However, older age groups and school-going adolescents had less likelihood of agreeing with premarital sex when compared with younger and out-of-school groups. Female adolescents had less probability of agreeing with premarital sex than males. In conclusion, accepting open sexual behavior is at risk of agreeing with premarital sex, but education programs in school may protect them from it. To provide knowledge and prevent the risk of premature sexual activity, sexual health should be promoted, including the appropriate sexual value, in primary school programs. In addition, the government should encourage sexual health through social activities for out-of-school adolescents.

Key words:

adolescents; attitudes; premarital sex; sexual behavior; Thailand

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INTRODUCTION

Premarital sex is commonly referred to as having had one's first sexual encounter before age 15.¹ Global surveys of premarital sexual intercourse vary widely. Data from the Youth Risk Behavior Surveillance (YRBS) (2018) in the United States found that 20.4% of students had initiated sexual relationships by the 9th grade or around 14–15 years old.² The Global School-Based Health Survey (GSHS) from eight African countries found premarital sex to be 27.3% among 15-year-old adolescents. Concerning first sexual intercourse, the prevalence was high in youth aged 11 years or under (11.8%), aged 12 years (5.5%), aged 13 years (3.9%), and aged 14 years (6.1%).³ The Demographic Health Survey (DHS) on sexual and reproductive health survey in early and later adolescence examined DHS Data on Youth aged 10–19 by the United States Agency for International Development (USAID) (2017) and found that 15% of women in Latin America and the Caribbean had an average age of sexual debut of 15 years old, while 1–2% of women in Southeast Asia (e.g., Indonesia, Myanmar, the Philippines), had their first sex experience at age 15.⁴ In Thailand, recent national surveys have found that the average age of sexual debut was 15.2 years for males and 15.4 years for females.⁵

The onset of premarital sexual intercourse at younger ages remains a concern in public health because it is related to a wide range of adverse health outcomes in adolescence. Premarital sex is often associated with unprotected sex and multiple partners.^{6–7} Those behaviors may lead to short and long-term consequences such as unwanted pregnancy and STIs.^{8–9} As a result of unwanted pregnancy, some adolescents had to undergo abortions, and only half had abortions by professional medical personnel.⁹ Unsafe abortions are related to the risk of death.¹⁰ In terms of mental health, students often suffer from

loss of respect, stress, and depression.⁹ Previous studies on the determinants of premarital sexual intercourse have shown a relation to individual factors, family, and social context.¹¹ Individual factors such as the attitude of adolescents toward sex have been shown to influence their sexual activities.^{12–13}

A study by Nik Farid and colleagues (2013) indicated that attitude toward premarital sex is one of the main predictors of premarital sex among Malaysian teenagers.¹⁴ A liberal attitude toward adverse sexual outcomes was associated with early adolescent sexual activity among rural Jamaican adolescents.⁷ Family relationships were found to be a determinant of sexual behavior among teenagers. Being in a happy family, which discusses sex and includes contraceptive information, influenced their attitude toward sex and responsible sexual behavior.^{15–17} Regarding the social context, in a study of Malaysian teenagers, female adolescents were less likely to have sex, while the opposite was true for male adolescents.¹⁸ It found that there was more pressure on boys to have sexual relationships by adolescence.^{19–20} Concerning education status, there is evidence that higher academic scores were associated with a lower likelihood of having premarital sex and getting pregnant or contracting an STD at this age.²¹ According to Erukclar and Ferede (2009), out-of-school girls aged 10–19 years living in an urban area of Ethiopia had sexual initiation and that they were frequently in coerced sexual relationships because they lacked support networks.²²

In Thailand, premarital sex among adolescents is considered both uncommon and socially taboo.²³ Social and cultural dimensions play an essential part and are highly relevant to sexual relationships among Thai teenagers.²⁴ Nevertheless, at present, society and culture have modernized. More adolescents have more freedom now than they did in the past.

Consequently, they have more opportunities to learn about stories regarding sexual relationships. Male and female students' opinions on sexual relationships before marriage are seen as a regular topic of discussion, and they also have become open-minded about couples cohabitating before marriage.²³ As a result, adolescents are becoming increasingly vulnerable to the consequences of premarital sex. Therefore, this study aimed to determine the factors associated with the attitudes toward premarital sex among Thai adolescents. The associations to be tested were age, gender, education status, place of residence, acceptance of sexual behaviors, and family relationships.

METHOD

This study drew data from the 2011 Social and Cultural Situation Survey, a nationally representative sample survey by the National Statistical Office (NSO) of Thailand. In this survey, the population covered all 13-year-olds and over who resided in the sample households; therefore, the study population was limited to adolescents aged 13–19 due to the survey

questions specific to respondents over 13 years old. The questionnaire was a self-assessment style related to accepting adolescents' sexual behaviors (male premarital sex, female premarital sex, [heterosexual] cohabitation, openness about one's sexual behavior, and premarital sex of adolescents under 15 years of age).

The population in this study was all adolescents aged 13 to 19 who resided in municipal areas and villages in all provinces. In total, 7,136 children aged 13–19 represented the subjects. Second, 1,188 children aged 13–19 who answered all survey questions were selected. This study investigated the attitude toward sex among those under 15. The analysis considered different levels of attitudinal acceptance of the independent variables (premarital sex, cohabitation, and open sexual behavior). The respondents who selected the answer indicating that they had no idea about their attitude toward the acceptability of these variables were excluded. Ultimately, the final population comprised 674 persons, or 56.7% of the survey population. The detail of the population selection process is described in Figure 1.

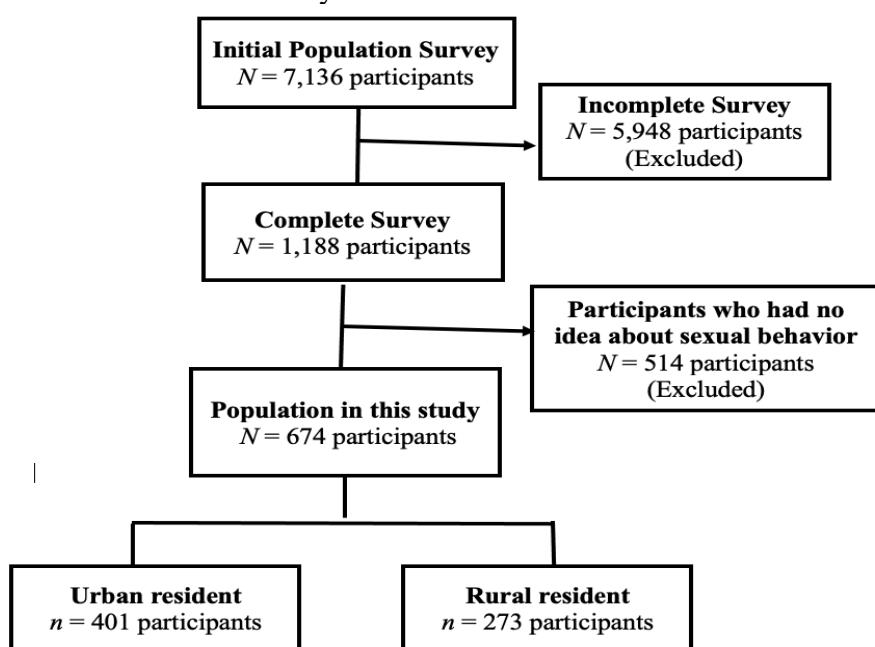


Figure 1. Population Selection Flowchart

The questionnaire was divided into three sections. The first section consisted of socio-demographic factors, namely age, gender, education status (school-going and out-of-school), and place of residence, denoted by the area adolescents lived (i.e., urban or rural). The second section consisted of the acceptance of sexual behaviors. The participants expressed their opinions through responses to the following statements: "Being open about one's sexual behavior is acceptable, but only for adolescents," "Premarital sex is only acceptable for male adolescents," "Premarital sex is only acceptable for female adolescents," "Male-Female cohabitation is acceptable for adolescents," and "Premarital sex under age 15 year is acceptable for adolescents." Answers were coded as agree (1 score) or disagree (0 score). The final section consisted of family relationships determined by the perceived amount of time family members spent together. Respondents were asked, "Presently, do you think your family members spend sufficient time with each other?" The answers were coded as sufficient (1 score) or insufficient (0 score).

Descriptive statistical measures such as percentages, frequencies, and arithmetic means were performed to describe each questionnaire response. To analyze the association between the attitude toward early sex under the age 15 years and outcome variables, Pearson's chi-square (χ^2) and logistic regressions were done. Variables with p value $< .05$ in bivariate analysis were further entered into binary logistic regression models, and an adjusted odds ratio (AOR) at a 95% confidence interval (CI) were calculated.

The researchers constructed sets of binary logistic regressions to predict attitudes toward sex before the age of 15 years. There were three models. The first model included demographic variables.

The second model added the measures of attitude toward sex behavior, namely openness toward sexual behavior and male/female heterosexual premarital sex and cohabitation. Finally, the third model included spending time with family members. The Cox and Snell's R-squared formula was adapted for a comparison between models.²⁵

Before conducting a logistic process analysis, a systematic approach was followed to prepare and assess the data set. Mahalanobis Distance.²⁶ was used for outlier examination and multicollinearity assessment through a correlation matrix. Berry and Feldman (1985)²⁷ suggested that the researchers draw on existing literature for guidance. In this case, Berry and Feldman concluded that multicollinearity is not a problem if the correlations between independent variables do not exceed a certain predefined threshold (e.g., 0.80). To assess the goodness of fit of three different models, the Hosmer and Lemeshow test was utilized for confirmation. Typically, a higher p value ($> .05$) suggests that the model fits the data well, indicating that the difference between observed and expected outcomes is not statistically significant.

RESULTS

A total sample of 674 students aged 13–19 ($M = 16.1$, $SD = 1.9$) participated in this study. The majority were female (63.9%). Most were school-going students (76.4%) and reported spending sufficient time with family members (89.6%). Over half of them agreed with the statements concerning acceptance toward male premarital sex (69.7%), female premarital sex (67.5%), openness to sex (54.9%), and premarital (heterosexual) cohabitation (72.6%) (Table 1).

Table 1. Association Between All Variables and Attitude Toward Premarital Sexual Intercourse Under Age 15 Years ($n = 674$)

Variables	Attitude toward premarital sex under age 15 years		Total n (%)	Chi-square (p value)
	agree n (%)	disagree n (%)		
Age (Mean = 16.1, SD = 1.9)				8.546
- 13–16 years (Mean = 14.6, SD = 1.1)	181 (49.7)	183 (50.3)	364 (54.0)	(.004)*
- 17–19 years (Mean = 17.8, SD = .8)	189 (61.0)	121 (39.0)	310 (46.0)	
Gender				6.327
- Male	149 (61.3)	94 (38.7)	243 (36.1)	(.012)*
- Female	221 (51.3)	210 (48.7)	431 (63.9)	
Educational status				9.288
- School-going	266 (51.7)	249 (48.3)	515 (76.4)	(.002)*
- Out-of-school	104 (65.4)	55 (34.6)	159 (23.6)	
Area of residence				.831
- Urban	223 (40.1)	178 (58.0)	401 (59.5)	(.362)
- Rural	144 (58.0)	129 (42.0)	273 (40.2)	
Acceptance toward openness to sex				266.226
- agree	308 (83.2)	62 (16.8)	370 (54.9)	(< .001)
- disagree	62 (20.4)	242 (79.6)	304 (45.1)	
Acceptance toward male premarital sex				250.797
- agree	352 (74.9)	118 (25.1)	470 (69.7)	(< .001)
- disagree	18 (8.8)	186 (91.2)	204 (30.3)	
Acceptance toward female premarital sex				258.216
- agree	347 (76.3)	108 (23.7)	455 (67.5)	(< .001)
- disagree	23 (10.5)	196 (89.5)	219 (32.5)	
Acceptance toward male-female cohabitation				230.682
- agree	356 (72.8)	133 (27.2)	489 (72.6)	(< .001)
- disagree	14 (7.6)	171 (92.4)	185 (27.4)	
Family relationship				3.552
- Spent sufficient time with family members	339 (56.1)	265 (43.9)	604 (89.6)	(.060)
- Spend insufficient time with family members	31 (44.3)	39 (55.7)	70 (10.4)	

Note: * $p < .05$

Table 1 presents the percentage distributions of the key variables. Among the sample of 674 participants, females

(63.9%) outnumbered males (36.1%). The average age was 16 years ($M = 16.1$, $SD = 1.9$), and slightly over half (54.0%) were

13–16 years. Three out of four (76.4%) were school-going students, and 89.6% said they spent sufficient time with their families. When analyzing the association between all variables and attitude toward sex under 15 years, gender showed a significant association ($\chi^2 = 6.327, p < .05$), as well as age and educational status ($\chi^2 = 8.546, p < .05$ and $\chi^2 = 9.288$, respectively). Whereas spending time with family did not show a nonsignificant association ($\chi^2 = 3.552, p > .5$), as well as area of residence ($\chi^2 = .831, p > .5$). The acceptance toward sexual behavior had a statistically significant relationship ($p < .001$) with attitude toward sex under 15 years, namely openness to sex ($\chi^2 = 266.226$), male premarital sex ($\chi^2 = 250.797$), female premarital sex ($\chi^2 = 258.216$), and heterosexual cohabitation ($\chi^2 = 230.682$).

When asked about attitudes toward premarital sex under 15, more males than females agreed with this behavior (61.3% and 51.3%, respectively). In the 17–19 age group, most agreed with the acceptability of premarital sex under 15 years (61.0%), but less than half in the 13–16 years group agreed with the same (49.7%). Just slightly over half (51.7%) of the school-going group agreed with premarital sex under 15

years, while those out of school agreed more (65.4%). Among the respondents who said they spent sufficient time with family, over half had an agreeable attitude toward premarital sex under the age of 15 (56.1%). The highest percentage of opinion went to the group that agreed with being open to sex (83.2%).

The group that agreed with the statement that “(premarital) sex is acceptable for male adolescents only” also agreed that premarital sex under the age of 15 years is acceptable (74.9%). The group that agreed with the statement that “(premarital) sex is acceptable for female adolescents only” also agreed that premarital sex under the age of 15 years is acceptable (76.3%). The group that agreed it is acceptable for a male and female to cohabit also accepted the idea of having sex under 15 years old (72.8%). After that, the researchers used logistic regression and the ‘Enter Method’ to test the variable set. First, the researchers examined the outliers of the observations using Mahalanobis distance.²⁶ This measurement led to the exclusion of 26 samples ($p < .001$) from 648 samples in total. Second, all independent variables were tested for multicollinearity by a bivariate correlation matrix.

Table 2. Bivariate Correlation Among Independent Variables (n = 648)

Variables	1	2	3	4	5	6	7	8	9
1. Age	1								
2. Gender		-	1						
		.090*							
3. Education status			-.133*	1					
			.289*						
4. Area of residence		-.050	.031		-	1			
				.131*					
5. Attitude toward openness to sex		.045	-.060		-	-.010	1		
				.087*					
6. Attitude toward male’s premarital sex		.088*	-.041		-.059	-.042	.632*	1	
7. Attitude toward female’s premarital sex		.088*	-.041		-.059	-.042	.632*	.987*	1
8. Attitude toward male-female cohabitation		.093*	-		-	-.052	.581*	.827*	.827*
									1
						.101*			

9. Family relationship	-.069	.145**	.008	.054	.009	.034	.034	.038	1
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Note: 1 = Age, 2 = Gender, 3 = Education status, 4 = Area of residence, 5 = Attitude toward openness to sex, 6 = Attitude toward male's premarital sex, 7 = Attitude toward female's premarital sex, 8 = Attitude toward male-female cohabitation, 9 = Family relationship; * $p < .05$, two-tailed

Table 2 shows the correlation between attitude toward male premarital sex, attitude toward female premarital sex, and attitude toward male-female cohabitation

had a high correlation. Therefore, such variables were excluded from the logistic regression analysis. The result of the analysis is presented in Table 3.

Table 3. Odd Ratios for Logistic Regressions Predicting Attitude Toward Premarital Sexual Intercourse Under Age 15 Years ($n = 648$)

Variable	Model 1	Model 2	Model 3	Model 4
	AOR [95% CI]	AOR [95% CI]	AOR [95% CI]	AOR [95% CI]
Age (years)				
17–19 years	1.334* [.825, 978]	1.496 [.844, 2.084]	1.526 [.877, 2.187]	
Gender				
Female	0.708* [.404, .905]	0.699 [.444, 1.081]	0.689 [.407, 1.010]	
Educational status				
In-school	0.656* [.407, .936]	0.736 [.408, 1.127]	0.743 [.411, 1.144]	
Area of residence				
Urban	0.818 [.647, 1.346]	0.776 [.721, 1.759]	0.768 [.703, 1.726]	
Acceptance of sex behavior				
Agree with openness to sex		20.499* [13.615, 30.864]	20.649* [13.692, 31.140]	20.178* [13.509, 30.138]
Family Relationship				
(Reference group: Spend sufficient time)				
Spend insufficient time with family members			1.675 [.809, 3.409]	
Pseudo R² (Cox & Snell R²)	0.027	0.362	0.364	0.350
Hosmer and Lemeshow test	0.175	0.5	0.665	

Note: * $p < .05$

Table 3 presents the binary logistic regression analysis results that interpret the probability coefficient for having a tolerant attitude toward having sex under 15 years of age. The Cox and Snell R² value reveals the prediction from independent variables.

The adjusted odds ratio (AOR) measures the predictive power of each variable. From the Hosmer and Lemeshow test, p values $> .05$ indicated that all three models are consistent with the observed data.

Model 1 presents demographic variables. This model accounts for 2.7% of the variance. Age, gender, and education had a relationship with the probability that the sample would view sex under age 15 years as acceptable, with statistical significance at .05. The group aged 17–19 years old had 1.3 times the probability of agreeing with sex under 15 years of age than the sample age 13–16 years (AOR = 1.334, 95% CI [.825, .978]). Females had 30% less chance to agree with this point than males (AOR = 0.708, 95% CI [.404, .905]). The school-going group had 35% less chance for acceptance of under-15-years sex than the out-of-school group (AOR = 0.656, 95% CI [.407, .936]). When adding acceptance toward openness to sex in Model 2 and adding family relationships in Model 3, those who agreed with being open to sex had a high probability of viewing sex under the age of 15 years as being acceptable, approximately 20 times higher than disagreed groups (AOR = 20.499, 95% CI [13.615, 30.864] and AOR = 20.649, 95% CI [13.692, 31.140], respectively). At the same time, demographic and family relationship variables had no statistically significant relationship. Model 4 concluded that adolescents who agreed with being open to sex had the highest probability of viewing sex under age 15 as acceptable (AOR = 20.178, 95% CI [13.509, 30.138]).

DISCUSSION

Male adolescents are more likely to agree with the attitude toward the idea of having sex under the age of 15 years than female adolescents because sons in Thai society are given more freedom than daughters. Historical cultural norms and societal expectations around sexuality in Thailand might explain the gender differences. Thai society traditionally valued male sexual freedom, while females were encouraged to control and be cautious about their sexual behavior.²⁸ This

perspective is linked to the idea that female virginity was essential and associated with a woman's value. This societal perspective might contribute to females being more conservative about premarital sex. In contrast, some communities regard premarital sexual practices among boys as acceptable because they expect boys to lose their virginity to show their sexual prowess and to mark their manhood.²⁹

This study also found that younger students are less likely to have a permissive attitude toward this idea than older students. The finding is consistent with the prior research on 157 boys and girls in grades 9 to 12 from high schools in Midwest America, demonstrating that younger students had more nonpermissive or conservative attitudes than older students.³⁰

The finding is consistent with the previous study, which found that younger students had more nonpermissive or conservative attitudes than older students.³⁰ In Thai society, youth aged 13–16 are still in the age of compulsory education and are under their parents'/guardians' care. Thus, there may be overwhelming pressure on them to prioritize studying, causing them to view under-age-15-years sex as less acceptable compared to those aged 17–19 years who may have a more liberated attitude regarding sex.³¹

Regarding educational status, there is a relationship between acceptance of sex before 15 years and formal education. The finding indicated that out-of-school adolescents show more acceptance of under-15-years sex than the in-school group. This finding is consistent with a previous study that found that the young individuals outside the formal education system tended to allow premarital sex more than those in school or higher educational attainment.³²

Previous studies confirmed that better opportunity for education influences the acceptance of sexual behaviors.^{33–35}

Education affects people's attitudes, including helping them set a goal for success. Some studies have indicated that adolescents with high educational performance and learning achievements would create the power of wisdom to prevent risky behavior.³⁶⁻³⁷ This can be seen in one study that found that nursing school students disapproved of being sexually active before graduation because they felt that sex would interfere with academic performance and limit their occupational options.³¹ One study found that high-performance students showed more preventive behaviors regarding sexual risks than those with moderate academic performance.³⁸

In addition, in-school adolescents had less acceptance of under-15-years sex than the out-of-school group because comprehensive sexuality education (CSE) has been a basic education core curriculum in both primary and vocational schools. This curriculum had topics on gender, sexual development, sexual rights and citizenship, violence, identity, and relationships, including specific issues for students aged 15 and over. A report by the Ministry of Education and UNICEF (2016)³⁹ found that more than 80% of 8,243 respondents had learned these topics. Almost half of them (45.3%) had an attitude to disagree with premarital sex at school age.

When considering the place of residence, this study did not find a statistical correlation between rural/urban residence and the attitude of a person having sex under the age of 15 years. One explanation is that the distinctions between rural and urban in Thailand are blurred by universal access to smartphones and social media. Thus, the area of residence as an explanatory variable for the new generation is likely to be irrelevant.⁴⁰

For family relationships, this study defined it as spending time with one's

family. Spending good time with family will help strengthen relationships. It is an effective method of reducing stress and improving mental well-being.⁴⁵ A prior study indicated that family relationship is the primary socialization that can shape adolescents' attitudes and behaviors. Adolescents' positive sexual perceptions, family warmth, parents' attitudes, and proper discretion over sexual engagement result from positive interactions within the family.⁴¹ The result of this study is inconsistent with prior studies, and it can be explained that the data are limited to existing factors because this study used secondary data that only assessed the time spent with family. It may not reflect the respondent's all dimensions of family relationships.

The odd ratio of demographic variables (age, gender, education status) and acceptance toward sexual behavior (openness to sex) is associated with attitude toward premarital sex under the age of 15. Regarding the relative importance of the context, Our findings indicate agreement with openness to sex has a strong effect on attitudes toward premarital sex under the age of 15 years old. Adolescents who agreed with acceptance of open sexual behavior were about 20 times more likely to have the attitude of premarital sex than those who did not agree. It can be explained that the influence of modernization and the globalization of media access has broadened opinions about what is acceptable and what is not. This phenomenon is spreading over Thailand and changing the values and norms that traditional society and culture could enforce.⁴² Changing norms about sexuality, Thai adolescents are changing to become more liberal (open-minded) and individualistic. They also acknowledge premarital sex, same-sex marriage, teen sex, and homosexuality from social media. Media outlets, including training, seminars,

television programs, and online channels, influence open-mindedness among teenagers who access social media.⁴³⁻⁴⁴ Our result is consistent with a previous study of 2,180 male and female adolescents aged 15–24 in 1994, which indicated adolescents with more liberal sexual attitudes are associated with a high risk of engaging in premarital sex.⁴⁶

LIMITATIONS AND FURTHER STUDY

This study used secondary data to analyze information about attitudes toward sexual behavior that might contain bias. In-depth interviews and qualitative analysis should be used to triangulate the increased reliability of results. Further study should explore factors influencing acceptance of open sexual behavior among Thai adolescents in various dimensions such as family structure, community, media access, and media literacy.

CONCLUSION

In conclusion, this study highlights a strong association between early sexual activity under 15 and the acceptance of open sexual behavior among the sampled adolescents. Specifically, male and older adolescents and those out of school are more likely to accept early sexual activity under 15. Understanding adolescent attitudes regarding early sexual activity is crucial. To address this issue and promote healthy sexual behavior, it is essential to provide knowledge and prevent the risk of premature sexual activity, including delaying the age at which they engage in sexual activities. This can be achieved by incorporating sexual health education, emphasizing appropriate sexual values, into the primary school program before adolescents become sexually active.

RECOMMENDATIONS

This research recommends guidelines for promoting appropriate sexual attitudes among adolescents. The government should implement policies that support sexual health programs in primary schools and encourage social activities related to sexual communication within Thai families to provide knowledge and prevent the risk of premature sexual activities. Additionally, enabling a screening media online system can help monitor inappropriate media. Campaigning and fostering social trends to promote teenagers as role models of Thai social values and culture would also be beneficial. Furthermore, the government should actively encourage sexual health through social activities, mainly targeting out-of-school adolescents who might not have access to formal education on this topic. By implementing these measures, society can work towards fostering healthier attitudes and behaviors related to sexual activity among adolescents.

ETHICAL APPROVAL

The Institutional Review Board (IRB) of the Institute for Population and Social Research, Mahidol University, approved the research protocol (Document Number 2017/03-067 IRB No. IRB 0001007).

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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