

## The Effectiveness of Life Skills Program on Life Skills to Prevent Risky Sexual Behaviours in Primary School Students, Thailand

Phagapun BOONTEM\*, Penprapa SUTHAMMA and Narunest JURAKARN

Faculty of Nursing, Srinakharinwirot University, Bangkok 10110, Thailand

(\* Corresponding author's e-mail: pboontem12@gmail.com)

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### Abstract

Risky sexual behaviors are a very serious problem, especially in youth and adolescence. This study aims to compare the effects of and integrated sex education and life skills program on life skills to prevent risky sexual behaviors in primary school students. **Design:** The study was conducted using a quasi-experimental, pre-posttest 2-group design. **Sample:** 34 primary students were in the control group, and 34 primary students were in the experiment group. **Intervention:** The experimental group participated in the integrated sex education and life skill program to promote life skills and prevent risky sexual behaviors, while the control group participated in the usual educational program regarding sexual and reproductive health that already exists in schools. **Measurements:** The data on both groups were gathered through questionnaires assessing demographic characteristics and life skills for preventive risky sexual behaviors. **Results:** The results revealed significant differences between the experimental and control groups ( $t$ -test = 2.39,  $p$ -value < 0.05) 3 months after the life skills programs, while no significant difference was noted in the experimental group ( $mean\ difference = -2.53$ ,  $p$ -value > 0.05). **Conclusions:** The integrated sex education and life skill program posed potential utility for primary students and also capable provision for further study for other groups.

**Keywords:** Sex education, life skills, primary school students

### Introduction

At the present time, the lifestyles of Thai teenage has changed swiftly along with changes in communication technology, such as on-line social networks, internet surfing, and imitation for materialism modernizing rather than for mentality aspects [1]. As an effect of these changes, both school-aged children and teenagers tend to have premature sex, causing early pregnancy and sexually transmitted disease infection, including unsafe abortion, which is becoming a crisis for Thailand. Through past studies, it was found that most causes were incurred from not using contraception or having sex with no protection and lack of sex education knowledge. Various sex education courses have been given, but obstructions to teaching them in schools exist, such as insufficient time, too much content, and information inconsistent with the targeted groups; in addition, there remain different opinions among teachers, with one faction seeing it is necessary for youngsters to have sex education, so as to be well aware and immunized, with another faction seeing it as an allurements to having premature sex, which discourages certain teachers in conducting sex education [2].

Besides this, life skills are important activities to enhance teenagers in learning and following basic development; they are skills suitable for students and teenagers, not only helping in solving problems in crises, but also guiding preventive strategies in the future [3]. The Reproductive Health Bureau, Department of Health, has developed handbooks and teaching aids to guide teachers and related staff in teaching students and teenagers as a form of holistic health promotion integration, which could help students and teenagers in solving problems and adapting so as to prepare for adulthood [2].

Many studies in western countries [3-10] argued in terms of a sex education program for primary students; for example: the studies “Use of a Social and Character Development Program to Prevent Substance Use; Violent Behaviors; and Sexual Activity Among Elementary-School Students in Hawaii” launched this program, with the results showing that risk-related behaviors were substantially reduced in students who had participated in the program, providing evidence that a comprehensive school-based program can have a strong beneficial effect on students.

Through interviewing teachers of 4<sup>th</sup> - 5<sup>th</sup> year primary classes in a primary school, it was found that sex education could not be taught, and no program on this issue was ever conducted. In one aspect, it was viewed that some children who learn through various media, such as the internet, could find that it can be 2-edged sword for them. One teacher recommended that, if sex education is to be taught at primary level, it should be have a content focusing on body care and skills in prevention. Therefore, the researcher conducted sex education in primary schools by using the handbook for integrated sex education and life skills, provided by the Department of Health [2], for schools to apply activities integrated together with their existing available content. The research question of this research was: what is the effect of integrated sex education and life skills on life skills to prevent risky sexual behavior in primary school students? The results of this research could lead to confidence in utilizing this teaching model in further integrated programs.

## Materials and methods

### Design and sample

This study aimed to compare the effect of an integrated sex education and life skills program on life skills to prevent risky sexual behavior in primary school students. A quasi-experiment, 2 groups pre-posttest designs was conducted. The experimental group was assigned to a sexuality education program integrated with life skills, while the control group was assigned to the usual available sex education program. The experimental group of 34 students in Grade 5 was recruited by purposive sampling (n = 34), as was the control group of 34 students, also in Grade 5 (n = 34), taken from another school. Four students of the control missed school on the day that the questionnaires were collected, making the number of students 30.

### Measures

The research instrument used in this study belongs to the Reproductive Health Bureau, Department of Health. It is a questionnaire on sex education and life skills, consisting of 20 items such as “*It is not proper to be alone with the opposite sex in a hidden place*”, “*Sex education importantly contributes to personality adjustment and relationships to enhance peaceful living in the society and is not against the social norms*”, “*You have appropriate ways to communicate with and to treat others*”, and so on. The scoring was set in 5 levels: 1 = the least, 2 = less, 3 = medium, 4 = more, and 5 = the most. The reliability test was conducted with 40 primary students, similar in level and characteristics to the participants, in a primary school in Ong Karak district, Nakhon Nayok province. The reliability gained was 0.75.

### Intervention

This study was conducted using a quasi-experimental, pre-test and post-test, 2-group design. The procedures followed the handbook for integrated sex education and life skills [2] as shown in **Figure 1**.

The time duration for activities on this program was around 50 min (1 period). To begin the program, students (n = 34) were assigned to complete the questionnaire; at the end, the students were assigned to complete the same questionnaire again. The experimental group was followed up on and retested for life skills 3 months later. Throughout the session of this program, a teacher, especially a physical education teacher, cooperated in the classroom to assist in managing the procedure and to deal with students. This meant that the teacher could also become more skillful and confident.

### Procedure in this study

The Experiment group were assigned to watch a video about physiological change in youths (boys and girls). Students were then assigned to the following activities:

1. In 2 groups: boys and girls, then given worksheets on skills of physiological and psychological changes to youth for around 5 min.
2. The researchers showed a body on a board for sticking ideas up on changes in youth, and given pieces of paper that filled words of physiological and psychological changes.
3. A group discussion with boys and girls was done to select the pieces of paper to stick on body.
4. As the conclusion for this section, the group separated into boys and girls and shown a video about caring for the body, then watched a video about life skills (social skills when playing with the opposite sex).
5. In the last section, the researcher concluded the session, then asked for written comments from the students.

**Figure 1** Procedure of study.

### Analytic Strategy

Descriptive statistics were used to analyze the demographic data. The independent t-test was used to compare the mean scores between the experimental and control groups, and of the pre-test and post-test. Analysis of variance with repeated measure was used to evaluate differences among the pre-test, post-test 1, and post-test 2 scores of the experimental group.

### Results and discussion

#### Results

As shown in **Table 1**, most of the experiment group were males (52.9 %), aged 11 years (91.2 %) being pupils in Prathomsuksa 5, whereas most of the control group were females (76.7 %), aged 10 years (93.4 %), and also Prathomsuksa 5.

In **Table 2**, the results showed there was no statistical difference in the mean scores on life skills between the control and experimental groups before implementation of the program (pre-test). After program completion (post-test), significant differences were found between the mean scores on life skills ( $t\text{-test} = 2.39$ ,  $p\text{-value} < 0.05$ ) of the experimental and control groups. As noted in **Table 3**, the experimental group showed significant differences in mean scores between the pre-test (before the program) and also post-test 1 (immediately after completion of the program on life skills ( $Mean\ differences = 5.09$ ,  $p\text{-value} < 0.01$ )). In any way, the post-test 2 (3 months after the program) showed no statistical difference in the mean difference.

**Table 1** Comparison of demographic characteristics of experimental and control groups.

Demographic characteristics	Experiment group (n = 34)		Control group (n = 30)	
	Number	Percentage	Number	Percentage
Sex				
Male	18	52.9	7	23.3
Female	16	47.1	23	76.7
Age (years)				
10	3	8.8	28	93.4
11	31	91.2	2	6.6
Education				
Prathomsuksa 4	0	0	1	3.3
Prathomsuksa 5	34	100	29	96.7

**Table 2** Comparison of questionnaire mean scores.

Variables	Control group (n = 30)		Experiment group (n = 34)		t-test	p-value
	Mean	SD	Mean	SD		
Skill-life						
Pre-test	80.33	11.37	82.18	7.54	.77	.44
Post-test	79.62	4.56	84.00	1.74	2.39	0.02*

\*p-value < 0.05

**Table 3** Using univariate analysis of variance with repeated measure, comparison of experimental group mean scores, differences between Pre-test, Post-test 1, and Post-test 2 (n = 34).

Variables	Mean	SD	Mean difference	
			Post-test 1	Post-test 2
Skill-life				
Pretest	82.18	7.54	5.09**	-2.53
Posttest 1	84.00	1.74		2.56
Posttest 2	79.62	4.56	-2.56	

\*\*p-value < 0.01

Additionally, the researchers obtained reflective comments from students from the experimental group after activities were completed, as per the following:

*“If aged less than ... years, one should not have sex”, “Additional tuition”, “Some more additional tuition with some exhibition”, “Wishing this activity was more, as it gives knowledge on sex education”, “Good”, “ Wishing for more additional activities”, “Wishing for more knowledge on sex education”, “Wishing to know about genders being”, “Wishing for teachers to teach how to use self-defense against the opposite sex”, “This activity gets children knowing and curious to know what sexual relations are”, “Teaching about how to care for sexual organs”, “When growing up, there will be changing”, “Giving advice properly”, “ Wishing for teachers to teach how to take care of organs in our body”, “Why are male and female separated”, “Females and males should not be in private together while school-aged, the female could get pregnant”, “How we shouldn’t act when growing up and*

*our sexual organs”, “Why hair grows longer”, “Wishing for more time to better know life skills and sex education”, “Wish for more activity like this, it is fun”, “More details on sex education should be taught”, “Good teaching with activities for testing”, and “There should not be sexual relations while being under-aged or less than 18 years”*

From these reflective words, primary students need to learn through integrated sex education and life skills programs, as it is vital for primary students to become more knowledgeable about sex education.

### **Discussion**

The new findings of this study revealed that the highlighted positive impacts of integrated sex education and life skills programs can be utilized with primary students. Immediately after being treated with the program, students in the experimental group, compared with those in the control group, reported having significantly more life skills. The findings are reassuring, since they demonstrate that the needs of primary students are culturally appropriate for their involvement (shown in their reflective comments). The study program contains contents on ‘physiological changes in girls and boys’, ‘appropriate expressions in sexuality, avoidance for abnormal touch’, ‘preventive measures for sexual abuse’, ‘communication in sex topics/relationships in the family’ and ‘roles of each gender/self-esteem’. This was similar to the study of Fongkaew *et al.* [11], which presented significant differences between the experimental and control groups; our study showed little difference in the 3-month follow-up on knowledge and attitudes toward sexual and reproductive health. This program assures potential contribution and enhances confidence in teachers who are responsible to teach this sensitive content. The reflective comments gathered from the subjects are highlighted as to benefit further study to develop programs for primary schools. The concept of life skills was first promoted by the World Health Organization [12] through life skills program on mental health as a means of promoting psychosocial competence. Since then, it has been extended to address a wider range of issues. Life skills-based HIV and sex education has proved to be a durable concept in education sector policy discourse on HIV and AIDS, despite a growing literature on the shortcomings in terms of its effectiveness in implementation in schools and delivering intended learning outcomes [4]. Although in this study did not mention prevention of HIV directly, it did mention prevention of risky sexual behaviors connected to HIV prevention. The results showed that this intervention can prevent risky sexual behaviors, although the result at 3 months was no different statistically; this might be as this is the first time this intervention to teach about sex education was used. From an interview with the teacher in the school: “It was found sex education could not be taught and no program on this issue had ever been conducted. At one point, it was viewed that some children who learn through various media, such as the internet, could find that it can be 2-edged sword for them. One teacher recommended that, if sex education is to be taught at primary level, it should focus content on body care and skills in prevention”. Therefore, teacher should be encouraged to launch this program and use it consistently.

### **Limitations of this study**

The limitations in this study can be scoped as the following: first, the result may be generalized only to populations of primary students in the study area, and may not be applicable to students attending schools in other areas. Secondly, the accuracy and honesty of the subjects responding to the questionnaires can be questionable, due to the content being of a rather sensitive nature for openly talking about sexual issues which contradict Thai mainstream culture. Respondents may not have fully expressed their true feelings and beliefs on sexual behaviors. Thirdly, the life skills to prevent risky sexual behaviors referred in this study may be directly in the minds of the students (see in reflective comments). Finally, the study was conducted with only 2 small sample groups in small scale schools, which could not confidently be assumed to represent their whole population. In terms of the implications for Public Health Nursing, this study could assure that the program be conducted in similar schools with similar cultural contexts for the same result, due to the judgments and skills used may possibly produce cultural effects.

## Conclusions

This study implemented a participatory approach and produced some positive results among primary students. Other similar programs should be implemented in other schools throughout Thailand; considering the current social conditions and situations, there remains the need for sexual education programs to be further developed for life-skill integrity, so as to improve change in risky sexual behaviors and the attitudes of Thai primary students. In terms of suggestions for further studies, it may be useful to conduct a longitudinal study to evaluate outcome measures of risky sexual behaviors of students and the effects of hypothesized mediators of intervention.

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## Human subject approval statement

Approval to conduct the study was granted by the Research Ethics Review Committee of Srinakarinwirot University (SWUEC 193/59 E), as well as the administrators of the 2 study-site schools. All students in grades 5 were approached by a researcher. Each student was also provided with a consent form for his/her parents to acknowledge, as well as an assent form for him/her to sign. Parents and students were instructed to return the respective signed forms to their class teachers within 3 days after the forms were given.

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