

# Effects of Leadership Development Program on Self-Efficacy in School Health Promotion, Thailand

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**Abstract.** Objective: To examine the effects of a health leadership development program on self-efficacy in health screening and life safety in school, among health education major college students. Methods: In this research, 22 health education major college students from the 2nd year of Srinakharinwirot university, Thailand volunteered to join the program. Students worked as a team to create a health promotion program (1 program per team) for the nearby community. Self-efficacy in health screening and life safety was measured using a self-administered questionnaire before and after the program. Data were analyzed using descriptive statistics such as mean and standard deviation, as well as Wilcoxon matched-pairs signed-rank test. Results: After program participation, self-efficacy in health screening and life safety increased significantly from baseline ( $P < 0.05$ ). Conclusion: Health promotion leadership program helps improves knowledge and self-efficacy. The Health Education department should encourage the students to learn and practice from direct experience to become quality health promotion leaders.

**Key words:** School health promotion, Health leadership development program, Self-efficacy, College students

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## INTRODUCTION

The promotion of health education in schools has been operated continuously in Thailand with the expectation to enhance a healthy society based on the definition of health under the new trend “A comprehensive and integrated health and social dimensions of body, mind and soul into a lifestyle linked and interrelated the human relationship with a physical and social environment”. In the past 10-year period since 2013, the Thai Health Promotion Foundation has provided funding to various partners for development projects in schools aiming to change the healthy enhancement behavior of children and youth groups (Erawan, 2015).

In Thailand, the research by Erawan (2004), studied and synthesized projects on the development of management systems and learning processes in the context of the health in schools of Thailand, totaling 14 projects since 1994. So, we can classify the objectives of healthy building into 4 aspects, namely 1) healthy students, 2) healthy school, 3) healthy environment, and 4) healthy social community.

Traditionally, schools have hosted health education to build health knowledge, skills, and behaviors. However, health education approaches have not been fully successful in reducing risky health behaviors among school children (Tomokawa et.al, 2018). To overcome such constraints, the World Health Organization (WHO; 1998) introduced the concept of ‘Health Promoting Schools—HPS’. The HPS has five components, namely school health policies, skills-based health education, health services, psychosocial health, and the physical environment. The HPS concept had been subsequently adopted and implemented globally. Several developing countries formulated national school health policies (NSHP) based on the HPS concept. For healthy students, health education teachers are professionals with clear role in enhancing students’ healthy and maintaining the healthy behaviors through the NSHP.

Health leadership development program is considered an enjoyable and favorable experience for

participants, capable of enhancing their personal development. Health promotion leadership skills are essential for health education teachers to establish a positive relationship with their students, improving their health and quality of life. In this perspective, health promotion leadership skills training can be effective strategies to improve the care provided by professionals in student care and the quality of health services (Mata et.al, 2021). Different methods for teaching and assessing health leadership skills training have been investigated (Ammentorp et.al, 2013; Yao, Li & Wildy, 2021).

As the health of students has become an increasingly prominent concern, researchers have gradually homed in on the need to conduct health research in the school. From the perspective of theory development, the concept of health-promoting leadership may enrich the leadership research. From the perspective of management practice, the existing research provides valuable guidance for organizations' sustainable development and delineates effective paths for leaders to follow (Yao, Li & Wildy, 2021).

Self-efficacy of the social cognitive theory developed by Bandura (1977) is based upon the principle that a relationship exists between an individual's perceived self-efficacy and behavior change. Self-efficacy, on the other hand, refers to an individual's belief in his capacity to execute behaviors necessary to achieve specific performance attainments. It reflects confidence in the ability to exert control over one's own motivation, behavior, and social environment. Its perceptions influence the choice of activity, task perseverance, level of effort expended, and ultimately the degree of success achieved. However, the development of self-efficacy in students should be matched with a supportive learning environment, which should involve various stakeholders of the school. To provide opportunities for students to enhance psychosocial development, leadership training program is one of the typical methods to train students' confidence and decision-making (Wong, Lau & Lee, 2012).

The philosophy of our programs (health education teacher program, faculty of physical education, Srinakharinwirot University) is based on a strategy – “Service Learning Approach”, which “...is a form of experiential education where learning occurs through a cycle of action and reflection as students work with others through a process of applying what they are learning to community problems and, at the same time, reflecting upon their experience as they seek to achieve real objectives for the community and deeper understanding and skills for themselves”. Therefore, we set up the health leadership development program to fulfill these personal experiences for our health education major college students.

In this study, self-efficacy is used for self-assessing the outcome of leadership skills training. It is a key element of social cognitive theory and refers to a person's estimate of her or his ability to perform a specific task successfully. The theory provides a framework for understanding how a person's self-efficacy may affect the person's behavior (Bandura, 1997; Gist & Michell, 1992), and research has shown that self-efficacy plays a predictive and mediating role in relation to motivation, learning, and performance (Gist & Michell, 1992; Van Diggele, Burgess, Roberts, et al, 2020).

The main purpose of the present study is to examine the effects health leadership development program on self-efficacy in health screening and life safety in school, among health education major college students. The major goals of health leadership development training and related school-based activities are to guide health education major college students to have successful experience in volunteer services and school based moral education programs. Health education major college students' self-esteem could be built up by gaining respect from teachers, classmates, friends, service target groups and the society. Trust and confidence are the key elements in building up health education major college students' self-efficacy.

## **METHODS**

### **Participants and design**

The research was a quasi-experiment as a one - group pretest and posttest designed using a program. Data for this study come from an onsite Health leadership development program on June-July 2022. The twenty two health education major college students from the 2<sup>nd</sup> year of the Srinakharinwirot university, Thailand volunteered to join the program. Students worked as a team to create a health promotion program (1 program per team) for a nearby community. The health education major college students participated in this study were informed, with their verbal consent obtained. The levels of self-efficacy in health screening and life safety were measured using a self-administration questionnaire before and after program. It was anonymous and only aggregate data were presented. Individual data or personal

particulars were kept confidential by researchers. During the consent process, all health education major college students were thoroughly offered a full description of the program including its duration, interventional components and commitments required. The students were informed that participation in the program is completely voluntary, and refusal would not lead to any penalties.

The health education major college students in this study received a health leadership training program, including organizing volunteer services and school-based moral and civic activities. All students were enrolled by the class teachers. There were no changes to the methods and trial outcomes after trial commencement. We regarded that this program would confer benefits to our students at their developing stage, irrespective of their baseline self-efficacy levels.

### Intervention

The health leadership development program on self-efficacy in health screening and life safety in school aims to improve the capability of the students to learn more effectively, develop creativity, willpower, emotional intelligence, social communication skills and critical thinking. The program was named “Health Promotion for Serves the Community”, targeting mainly to comprehension and practice about health screen and life safety in school. the health leadership training activities, volunteer services and school-based educational program was organized to promote health education major college students’ self-efficacy and confidence. This practice-based program was designed by researchers with extensive experience in health leadership development training. Its activity components have been designed, further discussed, and finalized among health education teaching professionals to suit the target participants, considering local situations. The theme of this project is **“health screening and life safety in school”**. It could provide opportunities for students to experience in teaching and practicing about health screening and life safety in school. The rationale of this project was to raise health education major college students’ confidence and build up positive self-image by carrying out leadership training and performing volunteer services, with an aim to build up their self-efficacy. After training, health education major college students could take this opportunity to show their concern and provide services for the children in Chumchon Wat Siriwong Mitrphap 162 School. The total contact hours were approximately 16 hours or 2 days of activity participation for a training period, with 4 hours for practice about health screen and life safety in Chumchon Wat Siriwong Mitrphap 162 School. The details of this training program were described in Table 1.

**Table 1.** the detail of health leadership development program on self-efficacy in health screening and life safety in school, among health education major college students

Phase	Period	Activity	Objectives
<b>Recruitment</b>	June 2022	Health education major college student recruitment	A total of 22 Health education major college students were randomly recruited as volunteers to.
<b>Volunteer training</b>	July 4-5, 2022	<ul style="list-style-type: none"> <li>- Pretest</li> <li>- Lecture and coach about health screening</li> <li>- Practice with peer to peer and Role play about health screening</li> <li>- Lecture and coach about life safety in school—good practice with following the traffic rules and the school fire for children</li> <li>- Practice by group activity and Role play how to teach</li> </ul>	<ol style="list-style-type: none"> <li>1. Onsite training session was organized for two days to train students on techniques regarding how to plan and organize a volunteer service especially for children.</li> <li>2. To build up students’ self-efficacy by sharing successful experiences in adversities</li> </ol>
<b>Experience and action period</b>	July 11,2022	- Voluntary Service—proactive at Chumchon Wat Siriwong Mitrphap 162	To develop students the sense of health screening and teaching

		School by screen the health children and teach the children (10-12 years) about good practice with following the traffic rules and the school fire	to children
<b>Evaluation and Experience Sharing</b>	July 15, 2022	- Survey the children's satisfaction toward our service - Group meeting by after action review about our program - Posttest	To consolidate the life experience of students in this program.

### Tools and Statistical Analysis

Self-administered surveys were used to assess self-efficacy before and after the program. The Self Efficacy Scale questionnaire in health screening and life safety in school was made by researchers and five-likert score from 1-5. This scale is designed for the health education major college students. It has 10 questions with a score range of 10-50; the higher the scores, the higher is the efficacy of the college students. The construct of Perceived Self-Efficacy reflects an optimistic self-belief (Schwarzer, 1992). Its Cronbach's alpha ranged from 0.76 to 0.90.

Descriptive and Wilcoxon matched-pairs signed-rank test were employed for data analysis. Mean and standard deviations were calculated to describe the general characteristics of respondents and children's satisfaction toward our program. The Wilcoxon matched-pairs signed-rank test was performed to determine the effect on self-efficacy in health screening and life safety in school of health education major college students was better than before using the health leadership development program. It is hypothesized.

## RESULT AND DISCUSSION

### Sample characteristics

Twenty two samples 66.70% were female and 33.30% were male, with a mean age of 19.29±.47 yrs.

### Perceived Self-efficacy of health screening and life safety in school

The perceived self-efficacy in health screening and life safety in school consisted of 10 questions with a score range of 10-50; the higher the scores, the higher is the efficacy of the college students. The mean pretest score of perceived self-efficacy in health screening and life safety in school with the sum of items in the scale was fair: 3.37±.81 out of a maximum of 5, while the mean posttest score of perceived self-efficacy with the sum of items in the scale was very good: 4.50±.49 out of a maximum of 5, respectively. Overall, the score of self-efficacy increased by 1.13 (Table 2). The intervention group was found to have improvement of self-efficacy score.

**Table 2.** Changes in the students' score of self-efficacy before and after the intervention (n=22)

Perceived Self-efficacy of health screening and life safety in school	Pre (mean± S.D.)	Post (mean± S.D.)	Change
Overall	3.37±.81	4.50±.49	+1.13

From Wilcoxon matched-pairs signed-rank test, the differences in mean rank score before and after the program of the intervention for self-efficacy in the changes, were found to be statistically significant ( $p < .001$ ) (Table 3). We concluded that this school-based health leadership development training program was effective to enhance on self-efficacy in health screening and life safety in school, among health education major college students.

**Table 3.** Comparison in mean rank of the students' score of self-efficacy before and after the intervention (n=22)

Students' score of self-efficacy before and after the intervention		Mean Rank	Sum of Ranks	Wilcoxon Signed Ranks Test Z	Asymp. Sig. (2-tailed)
After > before	Negative Ranks	5.50	5.50	3.487	.000*
Before<After	Positive Ranks	9.74	165.50		

\*P&lt;.05

### Satisfaction toward this program

The children' satisfaction toward our voluntary service proactive at Chumchon Wat Siritwong Mitraphap 162 School by screen the health children and teach the children (60 students; age 10-12 years) about good practice with following the traffic rules and the school fire. It found that the mean assessment of satisfaction obtained with the sum of items in the scale was very good:  $4.52 \pm .59$  out of a maximum of 5. After the service, the Chumchon Wat Siritwong Mitraphap 162 School students obtained the highest knowledge level about following the traffic rules and the school.

From twenty two health education major college students, we found that this health leadership development program was effective to enhance on self-efficacy in health screening and life safety in school among health education major college students. The difference in the change of these score of self-efficacy were statistically significant. Those results supported self-efficacy theory's (Bandura, 1997) purported link between feelings of ability to self-manage challenges and competence with social interactions, and social cognitive theory's (Bandura, 1997; Dwyer, 2019) suggested importance of coping with environmental challenges in the attainment of resilient social interfaces. Findings also not supported previous research of Wong, Lau & Lee (2012), they found that leadership training program were not found to be effective to enhance self-esteem and self-efficacy in adolescents.

However, our finding is in line with Chuchuen et. al. (2012) found that After training, knowledge level in stress management, but not in exercise and food consumption, increased significantly from baseline ( $P < 0.05$ ). Levels of attitude toward each aspect of health promotion after training were not different from their respective baselines. In terms of practice of the health promotion behavior, stress management behavior level, but not exercise and food consumption, after training increased significantly from baseline ( $P < 0.05$ ). Similarly with Phumphet et al. (2016) reported that the effectiveness of the nursing profession operation and changing of health nurses was better than before using transformational leadership development program significantly. Also Proud (2018) reported the impact of an established leadership development program on participants' perceptions of structural empowerment, leadership self-efficacy, and staff nurse clinical leadership in one university health system. He found that themes generated from the Clinical Nurse Leader Self-Efficacy Survey responses indicated participants felt high levels of confidence when performing the roles of client advocate, peer mentor, and professional practice leader, Including, the study of Moran, Israel & Sebelski (2021) found that the dynamic challenges of health care require an understanding of nursing professionals' leader self-efficacy considering their academic preparation and activities to grow the profession.

Furthermore, our result is in line with study of Similarity with a study of Mata et.al (2021) found that most programs lasted between 4½ h and 2 days, involved information about communication skills and the content was applied to the health professionals' context. Several teaching strategies were used, such as lectures, videos and dramatizations and the evaluation were carried out using different instruments. Improvements in the performance and in the self-efficacy of communication skills were observed in the trained groups.

### CONCLUSION

Potential developing in the health leadership program helps improves knowledge and self-efficacy in school health promotion. The faculty of Physical education, Srinakharinwirot University should

encourage the students to learn and practice from direct experience to become quality health promotion leaders

The limitations of this study are that no control group, the results are specific for the particular context and sample. The sampling procedure does not guarantee over- or under sampling of specific groups of participants. Further research on similar health leadership program would make it possible to compare and assess the consistency of the results from the present study.

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