## CHAPTER 7
REVIEW, MAJOR FINDINGS, CONCLUSIONS, IMPLICATION,
AND RECOMMENDATION FOR FURTHER STUDY

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7.1 REVIEW

A major part of human life concerns the attitudes toward life. All of human attitude towards life amount to nothing more than happiness. Fulfillment in attitudes can contribute to leading a satisfying and successful life. Students are considered the most valuable young generation in the society since they have been grown up to be man power of country. Factors involved in satisfying in attitude towards life are to achieve the goals and to attain the success, to have good health and wellness, to enjoy life, to be accountable, to work on the whole person i.e. physical, mental, and social well-being, and to be the self-esteem.

Physical activity is recognized as important factor for enhancing the attitude towards life. Regular physical activity is linked to enhanced physical, mental and social health and to reduced risk for all-cause mortality and the development of many chronic diseases. The students should be encouraged to have positive attitude towards standard of living by participating in physical exercise activities from the young generation continuously to the old generation. Physical education activity can establish the advantage to the positive attitude towards life and make the students to have the lifelong achievement and healthy physical activity patterns.

The present researcher is interested in studying the attitude towards life of secondary school students in relation to their participation in physical education activities since these attitudes and activities were provided in the subject of physical education, in the instructional process, and in extracurricular activity.

The statement of the problem is as under.

"A study of attitude towards life of secondary school students in relation to their participation in physical education activities"

Objectives of the study

The present research studied under the following objectives:

(1) To construct the scale to measure attitude towards life of secondary school students in Thailand.
To construct the scale to measure the participation in physical education activities of secondary school students in Thailand.

To study the level of participation in physical education activities of secondary school students.

To study the level of attitude towards life of secondary school students.

To compare the mean scores of the attitude towards life of secondary school students belonging to different groups of the students’ participation in physical education activities.

Variables of the study

1. Independent variable

The participation in physical education activities of secondary school students were the independent variable of the present study. It was divided into three levels i.e.

(i) High level

(ii) Moderate level

(iii) Low level

The participation in physical education activities of secondary school students in the present study were divided into three aspects i.e. physical education activity in curriculum setting, physical education activity in classroom instruction, and physical extracurricular activity.

2. Dependent variable

The attitude towards life of secondary school students was the dependent variable of the present study. It was divided into six aspects i.e. achieving goals and attaining success, health and wellness (physical health, mental health, social health), enjoy life, be accountable (accountability), work on the whole person, and self-esteem.

Hypotheses of the study

1. There will be no significant difference between mean scores of attitude towards life of secondary school students (total score) belonging to different levels of the participation in physical education activities.

2. There will be no significant difference between mean scores of attitude towards life of secondary school students (achieving goals and attaining success)
belonging to different levels of the participation in physical education activities.

(3) There will be no significant difference between mean scores of attitude towards life of secondary school students (health and wellness) belonging to different levels of the participation in physical education activities.

(4) There will be no significant difference between mean scores of attitude towards life of secondary school students (enjoy life) belonging to different levels of the participation in physical education activities.

(5) There will be no significant difference between mean scores of attitude towards life of secondary school students (accountability) belonging to different levels of the participation in physical education activities.

(6) There will be no significant difference between mean scores of attitude towards life of secondary school students (work on the whole person) belonging to different levels of the participation in physical education activities.

(7) There will be no significant difference between mean scores of attitude towards life of secondary school students (self-esteem) belonging to different levels of the participation in physical education activities.

Research method

Descriptive research was selected to be the research method of the present study. Descriptive research describes data and characteristics about the population or phenomenon being studied. The purpose of this type of research method is to answer the questions who, what, where, when and how. The description is used for frequencies, averages and other statistical calculations. The methods of descriptive research involved the survey which describes the situations and investigates the relationship between variables.

Research design

According to the objectives, the present study is mainly to describe the situations concerned to attitude towards life of secondary school in relation to the participation in physical education activities. The Likert-type scale is used for the data collection. The simple descriptive research design is used to determine the level of attitude towards life and the participation in physical education activities of secondary school students. The comparative descriptive design is used to test the significance between mean scores of attitude towards
life of secondary school students belonging to different levels of participation in physical education activities. Therefore, the participation in physical education activities was used to be the independent variable of the present study whereas the attitude towards life of secondary school students was used to be the dependent variable.

**Definition of the important terms**

1. **Attitude towards life**

   Attitude towards life means feeling of favorableness or unfavorableness which is the sum total of the individual response to the life. It is an enduring system of positive or negative evaluations, emotional feelings, and action tendencies with respect to human life. Attitudes have great influence on human life. The point of attitude towards human life is to stay as happy as possible in any given circumstance and to create a better tomorrow. The meaning of life is to grow physically, mentally and spiritually. Everyone has their own meaning and their own perception of life. The meaning of life is to live life and to make life meaningful.

   In the present study, attitude towards life refers to attitude towards life of secondary school students which divided into six aspects i.e.

   (a) **Achieving goals and attaining success** refers to the status of having achieved and accomplished goals or aim or objective. Being successful means the achievement of desired visions and planned goals.

   (b) **Health and wellness** refers to physical health, mental health, and social health. **Physical health** refers to every external part of body functions properly as it is commonly supposed to function. Physical health also indicates wellness of the internal body organs and their mutual cooperation. **Mental health** refers to a state of emotional and psychological well-being in which an individual is able to use his or her cognitive and emotional capabilities, function in society, and meet the ordinary demands of everyday life. **Social health** refers to the social beings that live in a complex social context at a satisfying or accomplishments of playing roles in the society.

   (c) **Enjoy life** refers to the feeling of favourableness or the positive outlook on the happiness of life which will help to realize the life and offers great possibilities for successful achievement in life.
(d) **Accountability** refers to the responsible and behaviours for the state of human-being which every human being has the ability to choose in order to make the happiness, satisfied and success.

(e) **Work on the whole person** refers to the ability of human being to combine the body, mind, and spirit to work together as a whole picture for the healthy life.

(f) **Self-esteem** refers to the experience which is appropriate to life and to the requirements of life. It is the confidence in the efficacy of mind, in the ability to think to learn, to make appropriate choices and decisions, to cope with the basic challenges of life and the confidence in the right to be happy, the feeling of being worthy, deserving, entitled to assert the needs and wants and to enjoy the fruits of the efforts.

2. **Participation in physical education activity** refers to any planned programme of motor activities provide for students to participate with knowledge and skills necessary to develop and maintain physical fitness, healthy lifestyle and well-being. The participation in physical education activities has three aspects i.e. Physical education activity in curriculum setting, Physical education activity integrated in classroom instruction, and Physical extracurricular activity.

(a) **Physical education activity in curriculum setting** refers to the physical education in Thai Basic Education Core Curriculum A.D. 2008 which provided the students about the knowledge, skills and favourable attitude towards strengthening one’s own health and that of others; prevention and proper treatment of various things affecting one’s health; and life skills.

(b) **Physical education activity integrated in classroom instruction** refers to the physical education activity which cooperated into every subject lessons

(c) **Physical extracurricular activity refers to** the activities performed by students that fall outside the realm of the normal curriculum of school.

**Sample of the study**

The Stratified Random Sampling Method was applied for selection of the sample in the present study. Two secondary schools of one district were selected from one selected province. 58 students from each school were selected by random sampling. Therefore, there were 2,552 secondary school students to be the sample of the study.
Research tools

There were two tools required for the study.

1. The scale to measure the attitude towards life of secondary school students

The scale to measure the attitude towards life of secondary school students was constructed by the researcher and consisted of 100 statements. Each statement has five levels of attitude towards life i.e. “strongly agree”, “agree”, “uncertain”, “disagree”, and “strongly disagree”. The respondents can mark the level of attitude towards life according to their opinions.

2. The scale to measure the participation in physical education activities of secondary school students

The scale to measure the participation in physical activities of secondary school students was constructed by the researcher and consisted of 60 statements. Each statement has five levels of the participation in physical education activities i.e. “very frequently”, “frequently”, “occasionally”, “rarely”, and “very rarely”. The respondents can mark the level of the participation in physical education activities according to their opinions.

The index of item-objective congruence (IOC) was used for the judges’ agreement in the preparation or manuscript form of the scale. After the IOC method was applied to the responses of the judges’ agreement, the obtained scores were compared with the criteria. The statements which could be accepted to be the statements included in the pre-pilot form of the scale should obtain IOC value between 0.50 – 1.00.

The construct validity was used for establishment of validity of the scale. The Item-Test Correlation was applied to the data obtained from 100 secondary school students. The Pearson Product Moment was calculated for the $r_{xy}$ value from the total scores and the score of each item. It was found that the score of each item in the scale to measure the attitude towards life obtained from 100 secondary school students indicated the $r_{xy}$ value between 0.52 - 0.83 which were significant at 0.01 level whereas the score of each item in the scale to measure the participation in physical education activities obtained from 100 secondary school students indicated the $r_{xy}$ value between 0.54 - 0.81 which were significant at 0.01 level.
For establishment of discrimination of the scales, the Phi-Coefficient correlation ($\phi$) and Chi-square ($\chi^2$) was applied. It was found that after getting $\phi$ value and converted in $\chi^2$ with the help of the formula $\chi^2 = N\phi^2$ and the significance of $\chi^2$ was checked with the table value of $\chi^2$. All the items of the scale which measure the attitude towards life and the scale which measure the participation in physical education activities have $\chi^2$ values greater than the table value of 3.84. It was also found that 100 statements in the scale to measure the attitude towards life and the scale to measure the participation in physical education activities adopt the $r_{phi}$ at 0.01 level of significance and the t-test values of each statement greater than 1.75.

It can be concluded that 100 statements in the scale which measure the attitude towards life and the scale which measure the participation in physical education activities have high discriminative power which can be used for the data collection with confidence.

In order to establish the reliability of the scale, test-retest method, split-half method, Rulon formula, and Flanagan formula was applied. It was found that the obtained $r_y$ and $r_x$ values of the two scales between 0.87-0.96 which indicated the highly reliability of the two scales.

**Technique of analysis of data**

The data collected from the tool was analyzed according to the hypotheses. The following techniques of analysis of data and the statistical calculations were employed.

1. In order to determine the level of the attitude towards life and the participation in physical education activities, mean ($\bar{X}$) and standard deviation (S.D.) was calculated.

2. The analysis of variance (ANOVA) was used to test the significant difference between mean scores of the attitude towards life of secondary school students having different levels of the participation in physical education activities i.e. low, moderate, and high.

3. The Studentized Range Statistics Test ($q$) was used just to get the general idea about the difference between mean score of various groups of the attitude towards life of secondary school students having different levels of the participation in physical education activities i.e. low, moderate, and high.
(4) The 0.05 and 0.01 level of significance were considered satisfactory for the acceptance or rejection of null hypothesis.

(5) The frequency distribution, tables were prepared and were placed in the report to present the data comprehensively.

(6) The percentage (%) was used to calculate the number of sample in comparison with 100.

7.2 MAJOR FINDINGS

(1) The participation in physical education activities rated by 2,552 secondary school students was at moderate level.

(2) There were 528 secondary school students (20.69%) obtained mean scores of the participation in physical education activities at high level whereas the other 855 secondary school students (33.50%) and 1169 students (45.81%) obtained mean scores of the participation in physical education activities at moderate and low level.

(3) The attitude towards life rated by 2,552 secondary school students was at moderate level.

(4) The obtained mean scores of the achieving goals and attaining success was at high level whereas the obtained mean scores of the health and wellness (physical, mental, social), enjoy life, accountability, work on the whole person, and self-esteem were at moderate, moderate, moderate, high, high, and moderate level respectively.

(5) The mean scores of the attitude towards life (total score) of secondary school students belonging to different levels of the participation in physical education activities were significantly difference.

(6) The mean scores of the attitude towards life (achieving goals and attaining success) of secondary school students belonging to different levels of the participation in physical education activities were significantly difference.

(7) The mean scores of the attitude towards life (health and wellness) of secondary school students belonging to different groups of the participation in physical education activities were significantly difference.
(8) The mean scores of the attitude towards life (enjoyment) of secondary school students belonging to different levels of the participation in physical education activities were significantly difference.

(9) The mean scores of the attitude towards life (accountability) of secondary school students belonging to different levels of the participation in physical education activities were significantly difference.

(10) The mean scores of the attitude towards life (work on the whole person) of secondary school students belonging to different levels of the participation in physical education activities were significantly difference.

(11) The mean scores of the attitude towards life (self-esteem) of secondary school students belonging to different levels of the participation in physical education activities were significantly difference.

(12) The mean score of the attitude toward life in total score and in six aspects rated by secondary school students belonging to low level of the participation in physical education activities has smaller value than that of the mean score of the attitude toward life in total score and in six aspects of secondary school students belonging to moderate and high levels of the participation in physical education activities.

(13) The mean score of the attitude toward life in total score and in six aspects rated by secondary school students belonging to moderate level of the participation in physical education activities has smaller value than that of the mean score of the attitude toward life in total score and in six aspects of secondary school students belonging to high level of the participation in physical education activities.

7.3 CONCLUSIONS

(1) The attitude towards life of secondary school students in total and in six aspects was at high level.

(2) The participation in physical education activities of secondary school students did effect on the attitude towards life of secondary school students.

(3) The students who obtained higher scores on the participation in physical education activities also obtained the higher scores on the attitude towards life.
(4) It was concluded that the attitude towards life of secondary school students has the relation with the participation in physical education.

7.4 EDUCATIONAL IMPLICATION

The results of the present study show that the participation in physical education activities does affect on the attitude towards life of secondary school students. In order to increase the participation in physical education activities, the suggestions should be as under:

(1) As physical activity is a ticket to health and well-being, it should be easily accessible, culturally acceptable, appealing and convenient to everybody. Schools and communities should ensure that physical education programmes have sufficient resources to deliver quality instruction, consistent with national standards, in safe, attractive, and well-maintained facilities. Policies should require that physical education instruction be provided by credentialed physical education teachers in classes with teacher-to-student ratios comparable with those in other subjects.

(2) Teachers should use methods that allow students to be actively engaged during most of the class time. Curricula should emphasize on participation in physical activities for all students and help students gain the knowledge, attitudes, motor skills, behavioral skills, and confidence they will need to adopt and maintain physically active lifestyles.

(3) Physical education activities provided by school under the policies of Ministry of Education must be ensure that it can increase student participation in moderate to vigorous physical activity and help the students to gain the knowledge, attitudes, and skills they need to engage in lifelong physical activity.

(4) Promote collaboration between physical education and classroom teachers. For example, physical education teachers might provide ideas for "fitness breaks" to classroom teachers, where 5-minute aerobic activities could be used to break up the school day.

(5) Provide extracurricular physical activity programmes. Interested teachers and parents might be encouraged to establish developmentally appropriate clubs and/or intramural activities of a competitive and noncompetitive nature. Walking clubs, in-line
skating, jumping rope, water aerobics, and intramural swim teams provide a few examples.

(6) Coordinate physical activities with community agencies. Schools might allow the use of school facilities by community agencies that sponsor physical activity programs, facilitate training programs for volunteer youth coaches, invite community groups to an "activity fair" for students in the school gymnasium, or provide a listing of community physical activity resources to students.

(7) Encourage and enable parental involvement in physical activity. Parental activity level is very important in promoting activity among children. Schools can help to encourage activity in parents by sending home activity homework that parents and children do together, recruiting parent volunteers for physical education classes, and sponsoring parent-child activity programmes at school.

(8) Provide physical and social environments which encourage and enable physical activity. For example, schools might allow access to facilities before and after school hours and during vacation periods, encourage teachers to provide time for unstructured physical activity during recess and during physical education class, and help school personnel to serve as active role models by enabling and encouraging their own participation in physical activity.

(9) To enhance physical activity programme, the school should keep in mind the following points:

(i) The encouragement for students is 60 minutes of physical activity on most, preferably all, days of the week. This includes moderate activity, such as playing basketball, soccer, swimming, or running, and physical activity as part of everyday life, such as doing household chores, walking to and from school, or taking the stairs instead of the elevator.

(ii) Modern conveniences such as cordless phones, remote control devices, video games, Internet, and accessible transportation as well as environmental challenges (e.g., lack of sidewalks in neighborhoods, poor lighting) should be contributed to a decline in the overall physical activity levels.

(iii) Make physical activity an integral part of the programmes, meetings, and events. Begin each session with an interactive physical activity icebreaker. Have the
students get up, stretch, and move around during breaks and allow them to be physically active after serving lunch or dinner. It takes only a few minutes to lead a stretching activity or do a set of jumping jacks. Research shows that increase in circulation and blood flow to the brain can improve concentration and performance.

(10) School should promote for the lifelong physical activity

(i) Teach students the health benefits and importance of regular physical activity.

(ii) Help youth to develop the knowledge, attitudes, and skills they need to adopt and maintain a physically active lifestyle. Provide opportunities for them to practice lifelong activities such as walking, running, jumping rope, swimming, bicycling, or skating.

(iii) Encourage youth to be physically active by providing examples of how they can fit more activity into their daily schedules. Youth can add physical activity into their routines by walking or riding their bikes to and from school, to friends’ houses, or to the store; taking the stairs; and helping out with chores such as mowing the lawn, gardening, or washing the car.

(11) School should plan a special event that highlights physical activity i.e. walk-a-thons, dances, or sports tournaments are great fundraising activities that also promote physical activity messages. Get students, parents, community members, and local businesses and agencies involved in planning and participating in the event. These events are great ways to promote physical activity and have youth to share health information with their parents and the community.

(12) Find out what physical activity opportunities (e.g., sports leagues, recreation centers, private gyms) are available for students and explore ways to support each other. A community programme or local business might be willing to provide sponsorship or resources for physical activities.

(13) Reinforcement of a physically active lifestyle is key to adopting it permanently. Encourage parents and guardians to support their children’s participation in physical activity, to be physically active role models, and to include physical activity in family events.
(14) Get everyone’s attention before explaining the details/rules of the activity. Always make sure to say “when” before “what.” For example, “When I say go, I want everybody to grab a ball.”

(15) Avoid games such as baseball and kickball that require half of participants to sit and wait for their turn. Find ways to modify a physical activity to include everyone (e.g., have more equipment available or play games with smaller teams).

(16) Physical education programme should emphasize physical activity and enjoyment over competition. Competitive sports are a good source of physical activity, but they are not for all students. Make sure to offer a wide range of competitive and non-competitive physical activities for a variety of abilities. This will help to student develop the skills and confidence to participate. Get involved with the physical activity in order to demonstrate the appropriate behaviour. Show that physical activity is important to young people.

(17) School should remember that physical education is a vital part of education in schools and has changed significantly over many years and generations. The curriculum should be high quality physical education in schools, as this will help students with many aspects including body awareness and kinaesthetic. High-quality physical education curriculum should enable all students to enjoy and succeed in many kinds of physical activity.

(18) Students should be introduced to the principles of regular physical exercise and recreational activities at an early age. Schools at all levels must develop and encourage positive attitudes toward physical exercise, providing opportunities to learn physical skills and perform physical activities, especially those that can be enjoyed for many years. The school curriculum should not overemphasize sports and activities but it selectively eliminate children who are less skilled. Schools must teach the benefits of exercise and the development and maintenance of exercise and exercise conditioning throughout life.

(19) Parents must know the health benefits of regular physical activity and how exercise contributes to quality of life in order to incorporate physical activity into their daily lives and those of all family members. Moreover, parents should teach their children that proper physical activity is a fundamental part of normal healthy living. This commitment provides an incentive, sets an example, and creates in students a positive attitude toward
physical activity. Parents and other family members must support each other’s exercise habits by sharing responsibilities such as child care, food preparation, and shopping. Families at high risk for cardiovascular disease benefit from structured programmes focused on specific health-behaviour changes.

(20) Teachers and parents should understand the students’ mind i.e.

(i) When instructing and creating lesson plans try to think like a student and predict possible reactions.

(ii) Bad experiences in physical education may cause a student to avoid physical activity, neglecting to stimulate the connections related to being active.

(iii) Try to incorporate activities that do not promote winners and losers. Formulate curriculum that has all students working towards the same goal or outcome.

(iv) A teacher should be approachable. If a student has a concern he should not be intimidated to bring the concern to the teacher. The teacher should let all students know when and how they can contact him/her.

(v) When speaking to a student, focus all attention on the benefit of physical activity on health and wellness.

(21) Schools and communities should promote physical activity among students because many students already have risk factors for chronic diseases. Schools and communities have the potential to improve the health of students by providing instruction, programmes, and services that promote enjoyable, lifelong physical activity. Schools are an efficient vehicle for providing physical activity instruction and programmes because they reach most students.

(22) Communities are essential because most physical activity among students occurs outside the school setting. Schools and communities should coordinate their efforts to make the best use of their resources in promoting physical activity among students. School personnel, students, families, community organizations, and businesses should collaborate to develop, implement, and evaluate physical activity instruction and programmes for students. One way to achieve this collaboration is to form a coalition. National, state, and local resources that might be useful in promoting physical activity among young people are available to schools and community groups.
Within the school, efforts to promote physical activity among students should be part of a coordinated, comprehensive school health programme, which is “an integrated set of planned, sequential, and school-affiliated strategies, activities, and services designed to promote the optimal physical, emotional, social, and educational development of students. The programme should involve and is supportive of families and is determined by the local community based on community needs, resources, standards, and requirements. It is coordinated by a multidisciplinary team and accountable to the community for programme quality and effectiveness”. This coordinated programme should include health education; physical education; health services; school counseling and social services; nutrition services; the psychosocial and biophysical environment; faculty and staff health promotion; and integrated efforts of schools, families, and communities. The programme should have the potential to improve both the health and the educational prospects of students.

7.5 RECOMMENDATION FOR FURTHER STUDY

On the basis of the research work carried out by the researcher, the suggestions for further study would be as follow:

(1) There should be a study of the guideline for school and community in promoting the lifelong physical activity among young people.

(2) There should be a study of the model of physical activity for increasing the participation rates of children and adults.

(3) There should be a study of the model of lifelong involvement in sport, physical activity and physical fitness.

(4) There should be a study of benefits of physical activities on the health wellness and implementation for the promotion of sport and physical activity.

(5) There should be a study of the roles of schools, teachers, parents, and community in providing the physical activities programme for increasing the lifelong wellness.

(6) There should be a study of students’ health awareness and the physical activity in the prevention of cardiovascular disease.

(7) There should be a study of the effectiveness of strategic plan of government for delivering the physical activities among children and adults.
(8) There should be an exploration of the perceptions and attitudes of parents and community regarding the active lifestyles and their experiences on physical activity participation.

(9) There should be a study of perceived benefits and barriers to healthful eating and physical activity among children and adolescents.

7.6 CONCLUSION

At the end, one can say that the physical, mental and social health can be grown up effectively since they have good attitude towards life. Therefore, physical activity is recognized as important factor for enhancing the attitude towards life. Physical education activities provided at school is an ideal way to develop fitness among students and will prepare the students for an active lifestyle. The result of the present study has shown that the participation in physical education activities does effect on the attitude towards life of secondary school students. It can be said that students’ participation in physical education activity has a positive impact on their physical development, social development and emotional development which related to the attitude towards life which comprises of achievement, health & wellness, enjoyment, accountable, ability to work on the whole person, and self-esteem of secondary school students.