

The Development of the Aerobic Dance Leaders Training Program

Surumpa Charoensuk Kaewwong¹, Chulaporn Sota²

¹Doctor of Exercise and Sport Sciences Program, Graduate School, Khon Kaen University, Khon Kaen Thailand,

²Faculty of Nursing Science, Khon Kaen University, Khon Kaen, Thailand

Abstract

The aerobic dance leaders who high level of knowledge are very important to encourage and support people to be able to do aerobic dance continuously. Therefore the aerobic dance leaders should advise people on how to do aerobic dance correctly according to the principles of exercise. However, some aerobic dance leaders had insufficient knowledge on aerobic dance. The purpose of this research was to develop of aerobic dance leaders training program and to evaluate the effectiveness of the training program. The volunteers 30 people. It is action research including: phase 1 the development of aerobic dance leaders training program, phase 2 the training program for aerobic dance leaders, and phase 3 the aerobic dance leading in communities for 8 weeks. It found that phase 1 the development of aerobic dance leaders training program had CVI is 0.93. Phase 2 the knowledge in aerobic dance of participants has been increased the aerobic dance leadership the self-efficacy and outcome expectations were also increased. Phase 3 the overall physical fitness of male and female participants in aerobic dance was better the self-efficacy and outcome expectations were also increased and ability to be aerobic dance leaders in overall is at a very good level. Conclusion the training program for aerobic dance leaders was able to develop people who have never been aerobic dance leaders before to be aerobic dance leaders in the communit.

Keywords: Aerobic dance leaders training program, aerobic dance leadership, self-efficacy, outcome expectations.

Introduction

If people do not have enough physical activities, it would be the main cause of death from non-communicable diseases.¹ Not having enough physical activities was a risk factor for deaths and incurred health expenses.² Over the past 10 years, one in three of Thai people have had insufficient physical activities. Aerobic dance exercise that is very popular. In Thailand, many organizations have campaigns for people to pay attention to their health with aerobic dance exercise such as department stores, and parks or even in the government and private sectors.

The good exercise leaders should inform knowledge in exercise to people properly according to the principles of exercise. However, it found that aerobic dance leaders in the community studied and learned aerobic dance from the purchased videotape by themselves³, so there is the raising of questions on what the quality of aerobic dance leaders is.

The purpose of this study was to develop the aerobic dance leaders training program, assess knowledge and ability to be aerobic dance leaders, self-efficacy and outcome expectations of being aerobic dance leaders. It also included follow up on the results of being aerobic dance leaders in the community by evaluating knowledge and ability of being a dance leader, physical fitness, self-efficacy, and outcome expectations for aerobic dance of the people who came to aerobic dance.

Corresponding Author:

Surumpa Charoensuk Kaewwong

Doctor of Exercise and Sport Sciences Program,
Graduate School, Khon Kaen University, Khon Kaen
Thailand-40002
e-mail: chusot@kku.ac

Method

This research is the action research which is divided into 3 phases below.

Phase 1: The development of the aerobic dance leaders training program: The researcher submitted the aerobic dance leaders training program to 3 experts in order to evaluate the content validity index (CVI). The research consisted of two main tools including the questionnaire for participants in the aerobic dance leaders training program (aerobic dance leadership, self-efficacy and outcome expectations, evaluation test on knowledge) and the questionnaire for participants in aerobic dance (aerobic dance leadership, self-efficacy and outcome expectations, physical fitness tests).

Phase 2: The aerobic dance leaders training program: The sample group was the undergraduate students from 3 departments including sport sciences, public health, and physical education at Roi Et Rajabhat University for 30 people calculated using WINPEPI Course Version 11.65 and added the size of sample for 20% to protect the withdrawal of sample group during the experiment. The inclusion criteria was that the participants haven't been aerobic dance leaders before, and the exclusion criteria was that the participants couldn't attend the research study as the schedule. Before and after training the sample answer questionnaire on aerobic dance leadership, self-efficacy and outcome expectations and evaluation test on knowledge in aerobic dance. The sample group attended the aerobic dance leaders training program for 20 hours.

Phase 3: The aerobic dance leading in community: The who passed the aerobic dance leaders training program will lead aerobic dance to people in the community. Before and after training the participants will be tested for physical fitness from the lecturer team from the Department of Sports Science, Roi Et Rajabhat University and answer questionnaires on self-efficacy, outcome expectations, and aerobic dance leadership. The aerobic dance leaders will lead aerobic dance to people in the community for an hour per day, 3 days per week within 8 weeks.

Statistics: Testing the differences within the group by analyzing the differences, using a pair t-test by SPSS Statistics 19.0 for Windows.

Results

Phase 1: The development of aerobic dance leaders training program: The inspection results of the aerobic dance leaders training program outline were found that the CVI was 0.93.

Phase 2: The aerobic dance leaders training program: It was found that the trainees increased knowledge in aerobic dance ($p < .000$), increased ability to be an aerobic dance leader ($p < .001$), and increased self-efficacy ($p < .002$) and outcome expectations ($p < .000$) as shown in table 1.

Table 1: The evaluation analysis of the aerobic dance leaders training program.

Variables	\bar{X}	S.D.	95%CI	t	p-value
Knowledge of dance aerobics					
Pre-test	16.37	2.03	-3.89 to -2.25	-7.65	<.001***
Post-test	19.43	2.31			
Ability to be an aerobic dance leader					
Pre-test	3.33	.72	-.87 to -.35	-4.74	.001**
Post-test	3.94	.42			
Self-efficacy					
Pre-test	3.70	.58	-.57 to -.15	-3.50	.002**
Post-test	4.07	.40			
Outcome Expectation					
Pre-test	3.38	.58	-.91 to -.45	-6.07	<.001***
Post-test	4.06	.39			

Note: P-values are results of pair t-test for variables of knowledge of dance aerobics, ability to be an aerobic dance leader, self-efficacy, and outcome expectation. * $p < .05$., ** $p < .01$., *** $p < .001$.

Table 2: The evaluation analysis of people who came to do aerobic dance.

Variables	\bar{X}	S. D.	95%CI	t	p-value
Self-efficacy					
Pre-test	42	3.7	-1.48 to -.37	-3.26	.001**
Post-test	42.92	3.57			
Outcome Expectation					
Pre-test	42.16	3.20	-1.60 to -.67	-4.79	<.001***
Post-test	43.30	2.97			

Note: P-values are results of pair t-test for variables of self-efficacy, and outcome expectation., * p < .05., ** p < .01., *** p < .001.

Phase 3: The aerobic dance leading in community:

The aerobic dance leaders had the ability to be the leaders in aerobic dance at a high level (4.23, S. D.=.56). After training, it was found that the people who came to do aerobic dance increased the self-efficacy (p<.001) and outcome expectations (p<.000) as shown in table 2.

It was found that all lists of physical fitness test have been improved after training in which female participants. For male, it was found that the VO₂max, grip strength, leg strengths as well as vital capacity higher than before aerobic dance with the statistical significance as shown in table 3.

Table 3: The evaluation analysis of physical fitness test before and after participating in aerobic dance.

Variables	Male (n=106)					Female (n=194)				
	\bar{X}	S. D.	95%CI	t	p-value	\bar{X}	S. D.	95%CI	t	p-value
Weight (kg)										
Pre-test	64.86	14.16	-1.63 to -.11	-2.27	.03*	54.03	9.11	.01 to .47	2.03	.04*
Post-test	65.74	13.58				53.78	9.13			
Body fat (%)										
Pre-test	15.97	6.15	-.62 to .70	.12	.90	29.78	4.35	1.29 to 2.38	6.62	<.01**
Post-test	15.93	5.91				27.94	5.20			
Grip strength										
Pre-test	.64	.12	-.06 to .02	-3.97	<.01**	.49	.10	-.05 to -.03	-8.66	<.01**
Post-test	.68	.12				.54	.10			
Leg strength										
Pre-test	1.79	.60	-.29 to -.15	-6.00	<.01**	1.16	.31	-.25 to -.15	-8.43	<.01**
Post-test	2.01	.52				1.36	.39			
Sit and reach										
Pre-test	11.60	7.13	-1.08 to .90	-.18	.86	8.55	7.29	-2.78 to -1.75	-8.64	<.01**
Post-test	11.69	6.64				10.81	6.87			
Vital Capacity										
Pre-test	56.48	17.29	-4.17 to -.12	-2.10	.04*	43.32	11.21	-11.35 to -7.51	-9.68	<.01**
Post-test	58.63	14.59				52.74	14.36			
VO₂max										
Pre-test	15.84	3.82	.20 to 1.00	2.96	<.01**	22.16	4.58	1.15 to 2.07	6.93	<.01**
Post-test	15.24	3.14				20.55	4.51			

Note: P-values are results of pair t-test for variables of weight (kg), body fat (%),grip strength, leg strength, Sit and reach, vital capacity, and VO₂max.* p < .05., ** p < .01.

Discussion and Conclusion

Phase 1: The development of the aerobic dance leaders training program: It was found that the content validity in CVI is 0.93. It shows that the components, principles and reasons, objectives, content, measurement and evaluation activities of the program outline are appropriate and passed all components. After the training program, had theoretical knowledge and practice. There is also an exchange of learning experience of aerobic dance leaders in order to encourage learners to have more experiences and support the trainees to apply the theoretical knowledge into the practice. Which the program should be designed by the participants themselves so that the program will be in line with the needs of the trainees and have training in the things that they can actually apply.^{4,5,6,7,8}

Phase 2: The aerobic dance leaders training program:

- 2.1 The knowledge in aerobic dance, it was found that after the training program had more knowledge in aerobic dance with the statistical significance. The developed training program helped the trainees have knowledge and understand about dancing and aerobic dance leadership as well as movement skills and aerobic dance. However the exercise leaders should have knowledge about the test of physical fitness and suggest method and techniques for proper exercise to prevent injuries that may occur.⁹
- 2.2 The aerobic dance leadership, it was found that after the training program had more aerobic dance leadership with the statistical significance as the trainees participated and performed various activities by participatory training and from follow-up after training. Which the exercise and sports leaders promoted greater participation in sports and exercise which had an effect on the members' health.^{10,11}
- 2.3 The self-efficacy, it was found that after the training program had more self-efficacy with the statistical significance. The trainees in the aerobic dance leaders training program received of the development of self-efficacy according to Bandura's concept.¹² This method will result in the changes of behaviors positively and determines the exercise goals and increase exercise.¹³
- 2.4 The outcome expectations, it was found that after the training program had more outcome expectations

with the statistical significance. In this research the trainees had high self-efficacy this also leads to increase the outcome expectations.^{14,15} It's due to the training program for aerobic dance leaders provided knowledge, advice about aerobic dance leaders and exchanged learning together. There was practical training to gain confidence and able to be an aerobic dance leader.

Phase 3: The aerobic dance leading in communities:

- 3.1 The physical fitness of the people who came to aerobic dance, found that all lists of physical fitness test have been improved after training in which female participants. For male, found that the VO₂max was increased, grip strengths and leg strengths as well as vital capacity higher than before aerobic dance. It shows that the results were caused by the aerobic dance that uses energy, and there are movements for both the upper and lower parts of the body. Which, it increases the heart rate and muscle functions and the subcutaneous fat was reduced, so it increases the endurance performance of the respiratory and circulatory systems, this may be a result of increased nervous system function. Therefore, aerobic dance program as a suitable program for losing weight and the development of aerobic abilities.¹⁹
- 3.2 The self-efficacy, it was found that after aerobic dance had more self-efficacy with the statistical significance. It may be the results used method of the development of self-efficacy according to Bandura's concept as follow:¹² used inspirational and persuasive words to show that everyone can be an aerobic dance leader, see other people's experiences by the role model from the people who came to aerobic dance, used emotional stimulation by talking to reduce anxiety and use simulation scenarios to reduce their stress,²⁰ and use of successful experiences. These method will result in the changes of behaviors positively.²¹
- 3.3 The outcome expectations, it was found that after aerobic dance had more outcome expectations with the statistical significance. It can be seen that the aerobic dance people knew the positive effects of aerobic dance and increased self-efficacy in exercise, so it is the factor that encouraged aerobic people to expect the outcome of aerobic dance increasingly.^{15, 22} The outcome expectations in aerobic dance can

explain exercise behaviors. It also included a short-term goals such as doing aerobic dance will help you have better health with a better shape or weight loss in order to encourage people who came to exercise can do aerobic exercise regularly and sustainably.

3.4 The who passed the aerobic dance leaders training program had knowledge and can be an aerobic dance leaders in their community, it was found that had aerobic dance leaders at a very good level. Being a good aerobic dance leader the dance leaders should have basic knowledge of correct aerobic dance, be able to provide first aid and be a good example of health care.¹¹ This is for the benefits and safety of those who do exercise.²³

Conclusion

It can be seen that the tools for the training program the researcher have created can be used as the aerobic dance leaders training program and the trainees who passed the training course have the ability to be aerobic dance leaders.

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