



ASSESSMENT OF A PROPOSED FREESTYLE SWIMMING SKILLS IMPROVEMENT PROGRAM FOR FEMALE COLLEGE STUDENTS

Percival Y. Capitulo^a and Jonar T. Martin^{a,*}

^aDepartment of Physical Education, College of Education, Angeles University Foundation, McArthur Hi-way, Angeles City 2009, Philippines

*Corresponding Author Ph: (63) (045) 625-2815; Email: jonarmartin@gmail.com

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ABSTRACT: The purpose of the study was to assess a proposed freestyle swimming skills improvement program for female college students. Participants were 87 college female students who were assessed in their freestyle swimming performance through performance test rubric, interview and observation. The proposed freestyle swimming skills improvement program for female college students was designed based on the freestyle skill performance rating of the students and based from the format of Hannula. Findings revealed that, in general the freestyle swimming performance of the respondents is fair. The proposed freestyle swimming skills improvement program for female students of AUF was assessed as excellent and may serve as a viable tool to improve the skills of female college students.

Keywords: Female college students; swimming skills; freestyle; physical education

INTRODUCTION

Swimming is an enjoyable activity for kids and adults and at the same time a very important life skill particularly in countries surrounded by water like the Philippines. It can help build up a person's strength, flexibility, endurance and considered as an effective cardiovascular workout. One can enhance his level of physical activity by swimming, and as a result increase the amount of energy he burns up which is a very important component of a weight management program [1]. A 1991 study found out that the hundreds of thousands of young people enrolled in organized swimming programs throughout the United States are thinner, stronger, and in better health than their non-swimming peers in a nation where 34% of children are reportedly overweight and up to half do not receive enough aerobic exercise to maintain adequate cardiovascular fitness. Participation in swimming programs also promotes self-discipline and responsibility and develops regular exercise habits that can benefit people throughout their lives [2]. To enjoy fully the benefits of swimming one should learn and train on the proper way in executing the swimming skills.

Swimming includes mainly different styles, among all of these styles the easiest to do and the most common is freestyle. The "front crawl", or "forward crawl", is a swimming style usually regarded as the fastest of all the styles developed. It is one of two long axis strokes, the other being the



backstroke. The main propulsive force of the freestyle stroke is the arm cycle. The legs add only 10% of total speed through the water. The main function of the legs is to help keep the body balanced and efficient to allow the arms to do their work and keep the body moving when the arm cycle is at its weakest point [3].

Physical education is a component of education that takes place through movement. It creates the opportunity for individuals to learn and understand academic applications for healthy lives. In physical education, as in all academic areas, students must learn the basic skills which require practice and refinement in physical education settings. The physical education curriculum today continues the emphasis on health-related fitness and developing the skills and habits necessary for a lifetime activity, allowing pupils to experience at least a minimum exposure to the following categories of activities: aquatics or swimming, conditioning activities, gymnastics, individual/dual sports, team sports, rhythms, and dance. Physical educators acknowledge swimming not only as a sport but also a key in achieving a physically active lifestyle and a healthy body [4, 5].

The Physical Education department of Angeles University Foundation (AUF) offers swimming classes for college sophomore students. The researchers observed that during swimming classes girls tend to be less proficient and having difficulty in doing freestyle. For this reason, this study aimed to prepare a proposed freestyle swimming skills improvement program for female students of AUF. Particularly the study sought to answer the following questions: a) What is the freestyle skills performance of the female college students? b) What is the design of the proposed freestyle swimming improvement program? and c) What is the assessment of experts on the proposed freestyle swimming improvement program for female college students?

METHODS

Research design and participants

This study was descriptive in nature. The participants of the study consisted of the sophomore female (N=87, Mean age= 17.7) college students who were having their swimming classes in their PE 03 namely; CAMP-14, CAS - 8, CBA – 20, CE - 3, CED – 6, CCS - 5, CON – 31. The number of respondents per College was based on the 10% of the total population of each College. Random sampling was used in selecting the participants who performed their swimming skills in freestyle. The researchers assessed the respondents swimming skill level through the use of a swimming performance rubric. The study was conducted at the Del Rosario Swimming Pool in Angeles City during their P.E. 03 classes.



Research instrument

This study utilized three types of research instruments, namely: questionnaire, interview, and observation. The researchers conducted observations on the swimming execution and performance of the respondents during their P.E. classes. Interview was done to gather information on the factors affecting the swimming performance of the students. Actual performance evaluation was also used in identifying the swimming ability level of the respondents through the use of a rubric. The questionnaire which was validated through content validation was used to assess the proposed freestyle swimming skills improvement program for female students of AUF.

Procedure

The swimming performance of the students were described and analyzed. The description on the swimming skills performance and swimming improvement guidelines by Hannula were used as a guide in designing the proposed freestyle swimming skills improvement program for female students Experts (N=10) in swimming validated the program.

Data analysis

The gathered data were classified, tabulated, analyzed and interpreted using frequency distribution, percentage and overall mean.

RESULTS AND DISCUSSION

Description on the freestyle swimming skills of the participants

Table 1 presents the description of the freestyle swimming skills of the respondents. As shown in the table, the leg action of the respondents obtained a mean of 2.75 which means they have a good performance, the arm action of the respondents obtained a mean score of 2.41 which means they have a fair performance, and rhythm breathing obtained a mean score of 2.18. An overall mean of 2.45 was obtained which means that the freestyle swimming performance of the respondents is fair. Data revealed that the respondents need to improve their swimming performance.



Table 1. Participants' freestyle swimming skills performance

Swimming Skill	Performance										Mean	Descriptive Interpretation
	Poor		Fair		Good		V G		E			
	1		2		3		4		5			
	F	%	F	%	F	%	F	%	F	%		
Leg Action	20	22.99	19	21.84	22	25.29	15	17.24	11	12.64	2.75	Good
Arm Cycle	29	33.33	22	25.29	15	17.24	13	14.94	8	9.20	2.41	Fair
Rhythm Breathing	33	37.93	25	28.74	15	17.24	8	9.20	6	6.90	2.18	Fair
Overall Mean											2.45	Fair

Design of the proposed freestyle swimming skills improvement for female college students

Table 2 presents the format of the proposed freestyle swimming skills improvement program for female students of AUF. The design of the program was based on the freestyle skill performance rating of the students. The skills that need improvement the most were given more emphasis in the design of the program. The proposed skill improvement program was designed guided by Hannula's book on coaching swimming successfully with the following format: name of the activity, objectives, highlights, and mechanics.

Table 2. The format of the proposed freestyle swimming skills improvement program for female college students

Name of Activity	Objectives	Highlights	Mechanics
Two arm side pool action	To familiarize students with the proper arm cycle and to focus one arm at a time.	Arm cycle	Let the students stand at one end of the pool make an alternate arm pull recovery action right and left. Hands landing beside the other hand. Tell your swimmers to observe a high elbow recovery.
Thumb and fingertip Drag	To promote a high elbow recovery and to make you aware of your hand position during recovery.	Arm cycle	Tell students to swim like regular freestyle, except your fingertips never leave the water as your arm moves forward during the stroke recovery. Instruct students to drag their fingers forward through the water, slightly off to the side of their body, focusing on good body roll and keeping your elbows pointed up.



One arm entry	To encourage a high elbow recovery and to make sure of students correct hand, wrist and elbow entry.	Arm cycle	Teach this at a standing position slightly knees bended. Start doing arm action starting from fingertips, hand, wrist, and elbow sequence. Talk to the students. Call out hand, wrist, and elbow as the arm goes though this sequence.
Chicken wing	To promote a high elbow recovery.	Arm cycle	Hook the arm in the armpits. In the one quarter chicken wing, the swimmer strokes the arm with the fingers no longer hooking the armpits but just off that position. In the one-half chicken wing, the swimmer strokes the arm with the fingers hanging down directly under elbows.
One arm front swim	To follow a streamline lateral kicking with arm action.	Leg kicking and arm cycle	Emphasize the forward extended position of the speared arm, the fingers of the extended arm should tipped up at all times in this drill. Have them do the stroke with one arm action only. Repeat the process until the students are familiar with the arm pull recovery.
Side pool lateral flutter kick	To execute flutter kick properly.	Leg kicking	Let the students hold on the pool side. Lying prone of the water let them kick beside the pool making as much bubbles as they do the kick. This will help them familiarize themselves with the leg action of freestyle.
Kickboard forward motion kick	To make the students propel while moving on the water.	Flutter kicking	Holding the kickboard forward in front and use the straight leg pointed toe kick with the hips on top of the water and simply propel or kick forward on the pool.



Streamline torpedo kick	To make students move on the pool without any kick board support.	Flutter kicking	Put the hands above the head then push off the walling keeping the hips slightly above the water. Propel or kick forward on the pool. Tell the swimmers not to break the hands or use hands to help move faster on the said activity.
Simple side breathing	To allow students acclimate on the water.	Rhythm breathing	On the pool simply put your face in the water. Blow bubbles nice and slow while facing down the water. And turning the head on to the side.

Assessment of the proposed freestyle swimming skills improvement for female college students

Table 3 presents the assessment of the proposed freestyle swimming skills improvement program for female college students. As can be seen in the table, the objectives of the program obtained a mean score of 4.88 which means excellent. The content of the program obtained a mean score of 4.46 which means very good. The format obtained a mean score of 4.59 which means excellent. An overall mean of 4.64 was obtained which means excellent. This indicated that the program is viable for female college students in improving their freestyle swimming skills.

Table 3. Assessment of the proposed freestyle swimming skills improvement program for female college students

Items	Mean	Descriptive Ratings
Objectives	4.88	Excellent
Content	4.46	Very Good
Format	4.59	Excellent
Overall Mean	4.64	Excellent

CONCLUSION

The findings of the study revealed that, in general the freestyle swimming performance of the respondents is fair. The proposed freestyle swimming skills improvement program for female students of AUF was designed based on the freestyle skill performance rating of the students. The skills that need improvement the most were given more emphasis in the design of the program. In addition, the proposed freestyle skill improvement was designed following Hannula's book in coaching swimming successfully with the following format: name of the activity, objectives, highlights, and mechanics. The proposed freestyle swimming skills improvement program for female



students of AUF was assessed as excellent and may serve as a viable tool to improve the skills of female college students.

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