Alternative Home Upper Body Workout Using Water Bottles For Selected College Freshmen Students of Angeles University Foundation

Michael E. Santos. 4,* Ph.D

^aAngeles University Foundation, Angeles City 2009 Philippines *Corresponding Author ph: +84 28 3822 7848 Email: michelsantas@gmail.com

DOI: 10.26524/1523

ABSTRACT: College students tend to be too busy to care about their health with the upcoming pressures and changes to their lifestyle. They are usually way too busy with their academic requirements, social life, and some of them who are also working to support their educational expenses for they do not have any time to enroll at a nearby fitness center.

The purpose of this research was to propose a cost free alternative home upper body workout utilizing used water bottles as a free weights equipment to promote strength, endurance and other health-related fitness. The proposed home workout program endorses knowledge and understanding of the students' participation in a health-related fitness training program.

The result of the study heavily relies on the up-close, personal experience, observation and participation of the researcher. The elements of the upper body training program, utilization of used water bottles, and evaluation emerged as tools in designing a practical home upper body workout program for AUF freshmen students.

Keywords: alternative home upper body workout; health-related fitness

INTRODUCTION

Schedules are a difficult thing to balance. A person must find the time to complete a number of tasks in a day. A normal adult may have time to get everything done and still have time to spare. The normal college student on the other hand is constantly on the go. College students have busy schedules that include working, studying, and socializing. Zinsser (1978) states that many college freshmen do not want to fall behind their classmates in academic; as a result, they study harder still so that they can be as competitive as their classmates [1]. Full time college students and some are also full-time workers have to plan everything out in order to make the time to get everything done. One of the things most college students don't make time for is working out. They often wait until they get drained and stressed from their academic requirements thus making their health, mental and physical abilities declined. College students must find time in their busy schedules to get physically and mentally fit, in order to keep up with daily assignments.

Martel (1995) acknowledges that burning fat, losing weight and ultimately staying fit and healthy are a lifelong commitment but it doesn't need to take over one's life and that's what's so special about the Home Workout Revolution [2]. It allows achieving the best fitness results in the shortest amount

of time possible giving you equal time to the different aspects of an individual's life. After a full day at school and work or even during weekends, doing homework out activities with family members can easily be done and included in one's daily routine. That itself would save a lot of time and money, and giving college freshmen the chance to spend more quality time with family and other social circles. Membership fees in the gym could be a little costly as it is in fact doing business with people too and daily or more often visits to the gym would cost much expense on transportation fare or gasoline per se

The use of dumbbells at home is one of the methods one can do during home work out. This method of body building doesn't only help in building muscle but it also helps reduce the stress acquired from work and the environment. These equipment pieces are great because they can just be easily stored in an appropriate storage at home and wouldn't occupy much space in your house. Even without the availability of enormous and heavy gym equipment's and gadgets exclusively found in the gym, one can still pursue his endeavor to lose weight, gain muscle and be fit fast at home. Pushups are also one great way to build muscle strength in the arms and chest. There are several pushup methods that can be utilized such as doing pushups on the knee instead of keeping them straight and an option between using a single arm or both. Pushups can also be done when standing against a wall.

It is on this reason the researcher pursued this study to design an alternative home upper body workout program that can give college students a wonderful and comfortable experience at home utilizing used materials such as water bottles as a workout equipment. The proposed home work out program served as a guide and offers various workout methods without the necessity of exclusive gym gadgets, diet and nutrition and directed students with specific steps to achieve one's general fitness goal.

1. METHOD

This study utilized descriptive method of research. According to Rivera (1994), this method describes and interprets the present situation [3]. This study aimed to prepare strength-training program that could be used in guiding the AUF Female students to attain strength in the highest level. Factors such as intensity, number of exercise per training, number of sets, number of repetition and rest intervals were the focus of the program.

The study was conducted at the Angeles University Foundation and selected Fitness Centers in Angeles City. The respondents of the study are the 25 random College students of AUF and 6 gym instructors of the selected Fitness Centers in Angeles City and 3 P.E. instructors of AUF.

This study utilized four of research instruments, namely:

1. Documentary Analysis

Client profiles of the selected Fitness Centers in Angeles City were used in identifying the students of Angeles University Foundation.

2. Interview

An unstructured interview guide was prepared to obtain appropriate data in formulating the proposed strength-training program. All questions were based on the objectives of the study.

3. Observation

The researcher has conducted observation in the selected Fitness Centers in Angeles City. Actual observation was based on the proposed strength-training program.

4. Questionnaire

A structured questionnaire was prepared to evaluate the proposed strength-training program. This questionnaire will be validated and pilot tested for the improvement in language, form and content. The following descriptive ratings will be set to facilitate the evaluation of the proposed strength-training program:

- 5 Strongly agree
- 4 Agree
- 3 Moderately agree
- 2 Disagree
- 1 Strongly disagree

Descriptive statistics, which include frequency and percentage distribution, were used in making the interpretation and analysis of the study.

2. RESULTS

I. DESIGN OF THE STRENGTH-TRAINING PROGRAM

1. Intensity

In strength training, intensity is expressed as a percentage of load or one repetition maximum (1RM). Intensity, a function of the strength of the nervous stimuli in training, is determined by muscular effort and CNS energy expended. Stimulus strength depends on the load, speed of movement, and variation of rest intervals between repetitions. Training load, expressed as intensity, refers to the mass or weight lifted. Strength training employs the following loads (table 1).

	·		8
Intensity Value	Load	Percent of 1RM	Type of Contraction
1	Supermaximum	> 105	Eccentric/Isometric
2	Maximum	90-100	Concentric
3	Heavy	80-90	Concentric
4	Medium	50-80	Concentric
5	Low	30-50	Concentric

Table 1 Intensity Values and Load Used in Strength Training

2. Number of Exercise

The key to an effective program is adequate exercise selection. It is often difficult to establish an optimum number of exercises and some fitness instructors, desiring to develop more muscle groups, select too many. The resulting program is overloaded and fatiguing. The number and type of exercises must be selected according to age and performance level.

One of the main objectives of training program for beginners and juniors is development of a solid anatomical physiological foundation. For strength-training, the fitness instructor should select many exercises (9-12) that address the primary muscle group. Such program may last 2 to 3 years, depending on age and the expected age for achieving high performance.

3. Number Repetition

Both number of repetition and the speed of execution are functions of load. The higher the load, the fewer the repetitions and the more slowly they are performed. For development of maximum strength (85 to 105%) the number of repetition is very low (1-7) (table 2).

Table 2 Number of Repetition

Percent of 1 RM	Number of Reps		
100	1		
95	2 to3		
90	4 to 5		
85	6 to 7		
80	8 to 10		
75	10 to 12		
70	15		
65	20 to 25		
60	25		
50	40 to 50		
40	80 to 100		
30	100 to 150		

4. Rest Interval

Rest intervals are critical to any successful training program. Energy is necessary for strength training. During training, an athlete uses the fuel of a given energy system according to the load employed and the duration of the activity. During high intensity strength training, energy stores can be taxed to a great extent sometimes even completely exhausted. To complete the exercise, say 4-6 sets, individuals must take a rest interval (RI) so that the depleted fuel can be replenished before another set is performed.

Load Percent Speed Rest Interval (minutes) **Applicability** >105 4 to 5 Improve maximum strength slow 80-100 slow to medium 3 to 5 Improve maximum strength 60-80 slow to medium 2 to 3 Improve muscle hypertrophy 50-80 fast 4 to 5 Improve power Improve muscle endurance 30-50 slow to medium 1 to 2

Table 4 Suggested Guidelines for Rest Interval between Sets

II. PROPOSED ALTERNATIVE HOME UPPER BODY WORKOUT FOR SELECTED AUF FRESHMEN STUDENTS

Table 4 illustrates the proposed strength-training program. The first column lists the number of exercise to be performed in a training session. The second columns show the type of exercises. The third column specifies the load, number of reps and sets. The last column indicates the RI to be taken following each set.

Table 4 Alternative Home Upper Body Workout Program (water bottles)

Exercise no.	Exercise	load, no. of reps, no. of sets	Rest Interval (minutes)
1	Bicep Curls	10-40/8 X 4	3
2	Dumbell presses	5-20/6 X 4	3
3	Triceps Extension	10-30/10 X3	2
4	Military Press	10-30/8 X4	3
5	Leg Raises	15X4	2
6	Dead lifts	5-20 X3	2

III. EVALUATION OF THE PROPOSED STRENGTH-TRAINING PROGRAM BY **RESPONDENTS**

Table 5 presents the evaluation on the proposed strength-training program by fitness instructor and student respondents. As shown from the table, intensity obtained a weighted mean of 4.89, number of exercise per training obtained a weighted mean of 4.86, number of sets obtained a weighted mean of 4.83, number of reps obtained a weighted mean of 4.79, and rest interval obtained a weighted mean of 4.86. All five items are rated "excellent". It shows that the proposed strength-training program is developmentally appropriate for the target learners and it stimulates their mind to train systematically and harder.

Table 5 Assessment of Alternative Home Workout Using Water Bottles

	Student	Instructor	Total	Weighted	Descriptive
Items	Respondents	Respondents	F	Mean	Ratings
1. Intensity	4.89	4.88	53	4.89	Excellent
2. Number of Exercise	4.79	4.92	53	4.86	Excellent
3. Number of Sets	4.82	4.84	53	4.83	Excellent
4. Number of Reps	4.89	4.68	53	4.79	Excellent
5. Rest Interval	4.75	4.96	53	4.86	Excellent

3. DISCUSSION

Results of the study show that the proposed alternative home upper body workout program is an excellent guide in conducting P.E. classes or training sessions among AUF students in promoting physical fitness and high performance abilities because of the following reasons: the proposed strength-training program is systematic applying the theories of fitness guru and icons; training sessions are safe; training objectives are clear: the program supplement high intensity training, analytical accurate and adhering latest concepts and trends in fitness; the program have good design for being scientific; and most especially the proposed strength-training program is relevant in gaining optimum strength. Since the experts rated the proposed strength-training program excellently, it is hereby recommended that the program be employed in teaching Physical Education. The need to change certain parameters is welcomed in order to further improve the training program.

References:

- 1. W. Zinsser (1978) College Pressures, California: Norton-Simon Publishing.
- 2. F. Martel, Anatomical Adaptation of Muscle in Different Exercises, Journal of American Medical Association, 201 (1995) 755-758
- 3. H. Rivera, Ectrodactyly and 7q22.1, American Journal of Medical Genetics, 53 (1994) 89.
