

A COMPARATIVE EVALUATION OF THE
EFFECTIVENESS OF THREE CONDITIONING PROGRAMS

by

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CHAPTER 1

INTRODUCTION

The way of life for many people in today's world of advanced technology lends itself to fewer working hours, and more hours of leisure. The human products of this technology, such as young college women, are discovering themselves physically unfit even at minimum standards. The importance of frequent and regular exercise in modern living should not be minimized.

PURPOSE

The purpose of this study was four-fold:

1. To design three different conditioning programs; one specific to flexibility, one specific to general muscular fitness, and one specific to strength.
2. To test each of the three groups for hip flexibility, trunk flexibility, back strength, leg strength, body fat, and general muscular fitness prior to and immediately following participation in the conditioning programs.
3. To compare pre- and post-conditioning scores of all tests.
4. To evaluate test scores in order to determine the effectiveness of the three conditioning programs.

LIMITATIONS

Subjects who participated in this study were divided into Groups 1, 2, and 3 according to their enrollment in one of three sections of Basic Fitness and Conditioning classes at Kansas State University

1. Closed class sections limited the number of students able to participate in the study.
2. Comparison and evaluation of testing was limited to participants who completed pre-conditioning test, programs of exercise, and post-conditioning testing to eliminate contaminated results.
3. Each of the three groups met for formal instruction of their exercise program twice weekly during the study. This will limit the improvements and gains made by the limited number of exercise meetings.
4. Because testing apparatus was not calibrated before testing, some degree of error will be present in pre- and post-conditioning testing scores.

Definition of Terms

Flexibility:	The ability to move a joint or muscle through its entire range of movement.
Isometric:	A type of muscular contraction resulting from the exertion of force against an immovable object. (static contraction) Tension increases while the muscle length remains the same.
Isotonic:	A type of muscular contraction resulting from the exertion of force against a movable object. (dynamic contraction) Tension is constant while the length of the muscles change.
Passive exercise:	Exercise in which length of the muscle is increased by slow stretching.
Dynamic exercise:	Exercise in which length of the muscle is increased by bouncing pressure.
Skinfold caliper:	An instrument designed to measure body fat.
Strength:	The external force exerted by a muscle or muscle group.