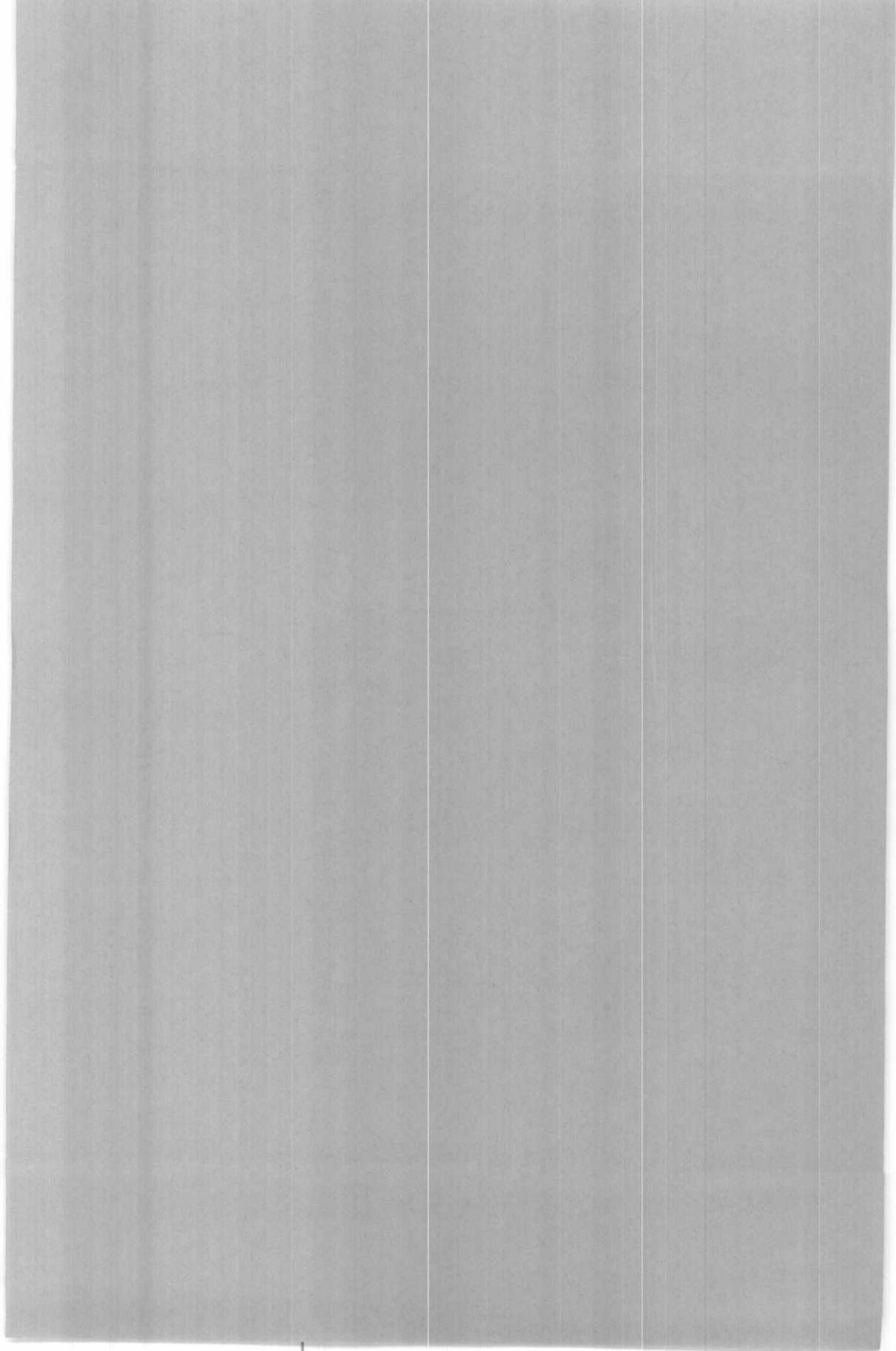
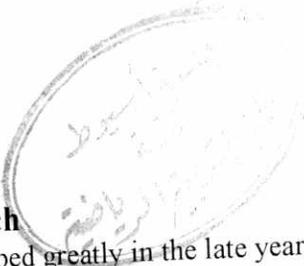


ثانياً الملخص باللغة الإنجليزية





Introduction and the problem of the research

The styles systems of training have been developed greatly in the late years of the 20 th centuries and the beginning of the twenty first century the trainer should follow everything and new continually to be able to raise the physical and skilful standard for the competitors.

As the great and continuous desire to reach the competitors at the highest physical levels and to break the record still form those who are in charge of the process of physical training.

Plyometric training is one of the modern training which many trainers used in developing the muscle power of the competitors, there for it is suitable for all levels and different stages,

The researcher noticed that during his training to the competitors of throwing in asiut area for the athletics the numeral standard of the competitors . So he suggested designing Aprograme to know the effect of using Plyometric training on developing the muscle ability and the standard of numeral achievement to the competitors of throwing (Shot , Discus , Javelin)

Aims of the research :

This research aims at :

- * Studying the effect of plyometric training on developing the muscles ability to the competitors of throwing at the competitions of (Shot , Discus , Javelin)
- * Studying the effect of plyometric training on the level of numeral achievement to the competitors of throwing at the competitions of (Shot ,Discus ,Javelin)

Hypothesis of the research :

- * plyometric training has a positive effect on developing the muscles ability to the competitors of throwing at the competitions of (Shot ,Discus , Javelin).
- * plyometric training has a positive effect on numeral standard of throwing competitors at the competitions of(Shot ,Discus , Javelin).

Theoretical readings :

Theoretical readings :included on introduction about the importance of training at the competitions of throwing and plyometric training , beginning , importance effects , advantages and what should be token into consideration at using it , Muscles power , speed and the relation of power to speed , its importance and components,

The procedures of the research :

Curriculum of research :

the researcher used the experimental Curriculum because it is suitable for the nature of the research by using the one experimental group to the competitors of throwing (Shot ,Discus , Javelin)
throwing the spear with precedent measurement and latter measurement

The Sample of the research :

The sample of the research has been chosen selected by using age way among the competitors of throwing which included five competitors for each competition under the age of (18 – 20) from Asiut area at athletic games.

Means of collecting data :

the researcher used the restameter set to measure length and medical scale to measure weight and measuring string to measure distances , stop watch , wooden boxes , medical ball , weights , discs and spears.

Also, aquestionnaira is used to reach the most important plyometric training and tests for the muscle ability.

Tests of muscle ability:

The researcher reached the most important test for muscle ability, which measures the physical standard of the competitors.

- The test of wide spring Jump of stopping
- The test of vertical spring Jump of stopping
- The test of passing medical boll using hands during standing up
- The test of passing medical boll using hands during standing up
- The test of throwing a smooth boll to the farthest possible place
- The test of throwing medical ball to the farthest possible place backwords.

The static method of analyzing:

The static steps that were used:

- Arithmetic average - Criterion inclining - The average
- Twisting - Tests

The most important results:

The researcher reached the most important results of the research according to the hypothesis and aims of the research.

- * plyometric training affects positively on developing the muscle ability eprese-nted by the distance that was achieved by the competitors at wide spring Jump, vertical Jump , posing smooth ball , medical ball , throwing medical ball , thro- wing medical ball backwords to the competitors of throwing , (shot ,Discus , Javelin)
- * plyometric training affects positively on the standard of numeral achievement to the competitors of throwing at all the competitions (shot ,Discus , Javelin)
- * plyometric training shows the existence of static differences between the Competitions of shot and Discus for the tests of co muscle ability tests.
- * the existence of static differences between the competitions of shot and spear for weight co muscle ability tests .

The recommendations of the research :

The researcher recommends – in the spotlights of the research with the following.

- * using plyometric training in developing the muscle ability in all competitions of throwing ,
- * using plyometric training in the sports activities which depend on numeral measurement on numeral measurement, in general to develop the numeral standard
- * The necessity of plyometric training application on training programs for Private preparations to the other track field competitions.
- * The designers depend on the scientific method in developing the muscle ability to use plyometric training .
- * The necessity of using plyometric training according to the working muscle in the private performance in throwing competitions .
- * Making a competitions study between the plyometric training and the traditional training .
- * Paying attention to the individual differences at designing plyometric training program ,
- * Applying such a study on other samples that differs at the age and sex in other Competitions of track field.

Assiut University
Faculty of physical Education
Field and Track competition department



The effect of a training program by using the plyometric training on Developing the musical power and the standard of numeral Achievements to the competitors of (Shot , Discus , Javelin)

A research presented from

Essam El- Deen Mohammed Youssif Abd El Ghafaar
The physical Specialist of Pharmacology Faculty – Assiut University

From the Requirements to get the Philosophy – Doctor degree in the physical education

The Supervision by

Prof. . Dr

Ahmed Maheer Anwer

The Professor of curriculum and Methodology and training, assistant of Physical Education Faculty for males In Cairo, Helwan University Affairs at post graduate Studies and researches,

Prof. . Dr

Fouad Rezk Abd El Hakeem

The Professor Head of Department of Competitions of Track and Field assistant of Physical Education Faculty Assiut University for the affairs Of serving the society and developing the Environment

Assiut

1425 h - 2004 m

