

**TRAINING FOR LOWER-BODY EXPLOSIVE POWER IN
ELITE BASKETBALL ATHLETES**



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for a Doctoral Degree

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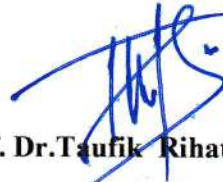
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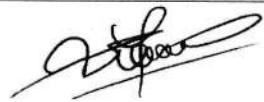
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2.	Prof. Dr.Widiastuti,M.Pd. (Anggota)	Not enough words;	P37-42	
3.	Prof. Dr.Drs.Hernawan.S.E.,M.Pd (Anggota)	Not enough words	P35	
4.	Prof. Dr.Taufik Rihatno,M.Pd (Anggota)	Add more references	P114	#
5.	Susilo,M.Pd.,M.Kes. (Anggota)	The group test results are to be added to Chapter 4.	P76	
6.	Dr.Sugiharto,S.Pd.,M.Pd (Anggota)	Add the raw data	P66	
7	Dr.Drs.Bahmid Hasbullah,M.Pd (Penguji Luar)	Reasons for selecting this group	P38-39	

Judul Disertasi :

Training model for Lower-Body Explosive Power And Control skills in elite basketball athletes

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ABSTRACT

This study aims to develop and test the effectiveness of a physical fitness training model for elite basketball athletes aged 18 to 25 years old. The research used a Research and Development (R&D) design based on the Borg and Gall model. A total of 80 eligible participants from Xinxiang, Henan Province were selected and randomly divided into an experimental group and a control group, with 40 subjects in each group.

A 12-week intervention was implemented, with 3 training sessions per week and approximately 30 minutes per session. The experimental group received a systematically designed physical fitness training model focusing on cardiopulmonary endurance, muscle strength, flexibility, and balance & core stability under professional guidance. The control group performed a conventional community fitness program with independent training and no targeted guidance.

After data collection, no missing data were found. Descriptive statistics, normality tests, and the Shapiro-Wilk test revealed that the Ngain_Score data of physical fitness indicators were not normally distributed ($p < 0.05$) in both groups, mainly due to extreme outliers. Therefore, non-parametric tests were applied instead of parametric tests.

The Mann-Whitney U test results showed a statistically significant difference in the Ngain_Score between the two groups ($U = 322.000$, $Z = -4.600$, $p < 0.001$). The experimental group had a significantly higher mean rank and greater improvement in physical fitness than the control group.

It can be concluded that the developed physical fitness training model is effective and feasible for improving the physical fitness of individuals aged 18–25 years. This model is scientifically based and can be recommended as a practical fitness program for the middle-aged population.

Keywords: Training Models, Explosive Power, Control Skills, Basketball Athletes.

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PREFACE

The dissertation, entitled Training for lower-body explosive power in elite basketball athletes is the research outcome of the author's doctoral Physical Education Studies at the State University of Jakarta.

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The author would like to express his deepest gratitude to all other parties who have also supported the author in completing the results of this research. The author realizes that this result is still far from perfect, so with humility the author is ready to accept criticism, input and suggestions so that this research proposal is getting better. That's what the author can convey and the attention the author will thank you.

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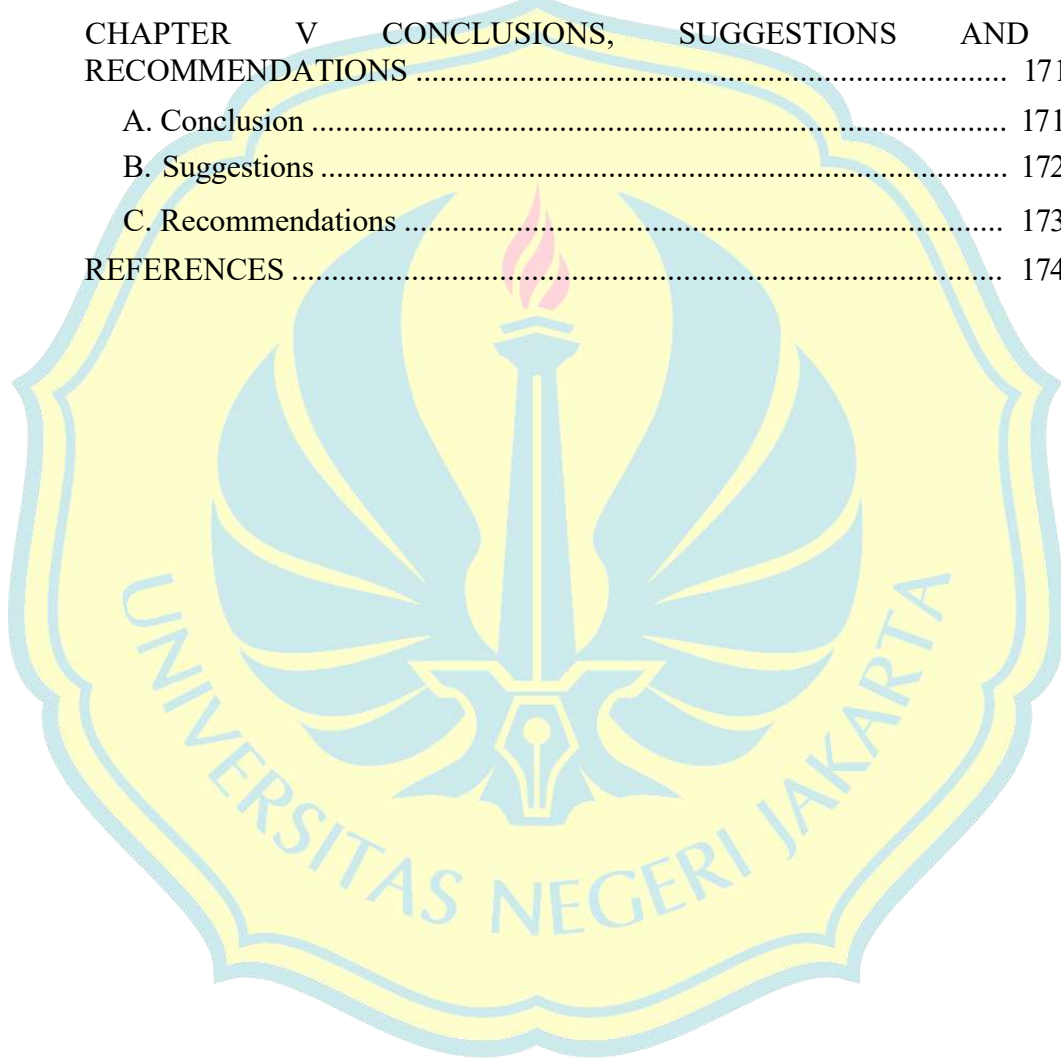
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TABLE OF CONTENTS

LIST OF CONTENTS.....	xix
LIST OF FIGURE.....	xxi
LIST OF TABEL.....	xxii
CHAPTER I INTRODUCTION	1
A. Background	1
B. Research Restrictions	6
C. Problem Formulation	7
D. Research Objectives	7
E. State the Art	7
CHAPTER II OVERVIEW	12
A. Model Concept	12
1. Model Borg & Gall	13
2. Model Kemp	16
3. Model Dick and Carey	16
4. Model ADDIE	18
5. Model ASSURE	20
6. Model Smith <i>and</i> Ragan	20
7. Model Kemp	23
8. Model Gerlach dan Ely	24
B. Concept of the Developed Model	27
C. Training Model Theory in Sports Performance	29
1. Principles of Lower-Body Explosive Power Development	30
2. Neuromuscular Control and Movement Quality	31
3. Integration of Explosive Power and Control Skills	31
4. Periodization and Training Model Structure	32
5. Theoretical Framework of the Proposed Training Model	33
D. Design Model	33
E. Theory of Characteristics of Student in Elite Athlete	75
F. Design Model	130
CHAPTER III RESEARCH METHODS	144
A. Research Objectives	144
B. Place, Subject and Time of Research	144
C. Characteristics of Training Models	145

D. Research Approach and Methods	148
E. Model Creation Steps	149
F. Data Type	151
CHAPTER IV RESULTS AND DISCUSSION	153
A. Result Research	153
B. Discussion	168
CHAPTER V CONCLUSIONS, SUGGESTIONS AND RECOMMENDATIONS	171
A. Conclusion	171
B. Suggestions	172
C. Recommendations	173
REFERENCES	174



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LIST OF FIGURE

Figure 1.1 Research Road Map	11
Figure 2.1 Design Research Model Borg & Gall	13
Figure 2.2 Model Kemp	16
Figure 2.3 Model Design Research Dick and Carey	17
Figure 2.4 Model ADDIE	19
Figure 2.5 Design Learning Model Smith an Ragan	22
Figure 2.6 Model Design and Development Learning	23
Figure 2.7 Design Learning Model Gerlach and Ely	25
Figure 2.8. Design Model Borg & Gall	28
Figure 3.1 Model Borg & Gall and Gal, Meredith D 4 th Edition (New York; Logman Inc, 2003)	148
Figure 3.2 Model Training Design	152
Figure 4.1 Experimental Group Pre Test Data Distribution Chart	163
Figure 4.2 Data Distribution Chart of Experimental Group Post Test	163
Figure 4.3 Control Group Pre Test Data Distribution Chart	163
Figure 4.4 Control Group Pre Test Data Distribution Chart	164

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LIST OF TABLE

Table 1.1 State The Art	9
Table 2.1 Model ASSURE	20
Table 3.1: Characteristics of Research Subjects.....	145
Table 4.1 Data on Pre-Test and Post-Test Results of Training Model for Lower Body Explosive Power And Control Skills In Elite Basketball Athletes.....	161
Table 4.2 Data Tests of Normality.....	162
Table 4.3 Summary of Data Homogeneity Test Results.....	164
Table 4.4 Summary of Test of Normality Results N-Gain.....	165
Table 4.5 Test of Homogeneity of Variance.....	166
Table 4.6 Summary of Mean Ngain_Percent Calculation Results.....	166
Table 4.7 Summary of Independent Samples Test Calculation Results Independent Samples Test	167



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