

UNIVERSITI TEKNOLOGI MARA

THE EFFECT OF UNILATERAL AND BILATERAL
EXERCISE ON ANAEROBIC POWER PERFORMANCE TO
FOOTBALL ATHLETE

By

ADY NAZMI BIN AZHAR

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TABLE OF CONTENT		PAGE
ACKNOWLEDGEMENT		i
TABLE OF CONTENT		ii
LIST OF TABLE		v
DECLARATION		vi
ABSTRACT		vii
CHAPTER		
1.	INTRODUCTION	
	1.1 Background of the study	1-3
	1.2 Problem Statement	4
	1.3 Research Objective	5
	1.4 Research Hypothesis	5
	1.5 Significant of Study	6
	1.6 Definition of Terms	7
2.	LITERATURE REVIEW	
	2.1 Football	8-9
	2.2 Anaerobic Power	10
	2.3 Unilateral Exercise on Football	11-12
	2.4 Bilateral Exercise on Football	13-14
	2.5 Unilateral Exercise Effect on Anaerobic Power	15
	2.6 Bilateral Exercise Effect on Anaerobic Power	16-17
3.	RESEARCH METHODOLOGY	
	3.1 Introduction	18
	3.2 Research Design	18
	3.3 Population And Sampling	19

3.4 Instrumentation	
3.4.1 Wingate Machine	19
3.4.2 Barbell	20
3.4.3 Weight Plate	20
3.5 Data Collection Procedure	20
3.5.1 Single Legged Squat	22
3.5.2 Unilateral Hip Extension	23
3.5.3 Unilateral Lunge	24
3.5.4 Bilateral Back Squat	25
3.5.5 Bilateral Front Squat	26
3.5.6 Bilateral Hip Extension	27
3.6 Data Analysis	
3.6.1 Descriptive	28
3.6.2 Inferential	28
4.	RESULT
4.1 Introduction	29
4.2 Descriptive Statistic	29-30
4.3 Paired T-test	31-33
5.	DISCUSSION
5.1 Discussion	34
5.1.1 Effect Unilateral Exercise on Anaerobic Power	35
5.1.2 Effect Bilateral Exercise on Anaerobic Power	36
5.1.3 Most Effective Exercise between Unilateral & Bilateral Exercise	37
5.2 Conclusion	38
5.3 Recommendation	39
REFERENCES	40-41
APPENDICES	42-43

Abstract

The purpose of the study was done to investigate whether the unilateral and bilateral exercise can affect the anaerobic power performance of football athletes. In this study, 30 subjects were chosen and divided into two groups which were unilateral and bilateral group respectively. The subjects underwent six-week unilateral training of single legged squat, unilateral hip extension and unilateral lunge. They also have done six-week bilateral training of bilateral back squat, bilateral front squat and bilateral hip extension. The athletes have done a pretest one day before training and post-test after six week training. The data of minimum, mean and peak power have been recorded and calculated. The results shows that only peak power got significant result where pre peak power of athletes (784.47 ± 166.37) as opposed to the post peak power of athletes (839.47 ± 126.92) trained using unilateral exercises; there is statistically significant decrease of -63.6 (95% CI, -101.2 to 25.98), $t(14) = -3.626$, $p < 0.05$ while pre peak power of athletes (784.47 ± 166.37) as opposed to the post mean power of athletes (839.47 ± 126.92) trained using bilateral exercises; there is statistically significant decrease of -46.4 (95% CI, -83.52 to -9.28), $t(14) = -2.681$, $p < 0.05$. Thus, it can be concluded that unilateral and bilateral exercises can improve the peak power of the athletes.