

TABLE OF CONTENTS

	Page
Certificate by the Supervisor	ii
Declaration by the Scholar	iii
Dedication	iv
Acknowledgement	v
Table of Contents	vii
List of Tables	x
List of Illustrations	xii
List of Appendices	xiii
CHAPTER I INTRODUCTION	1 - 18
1.1. Introduction	1
1.2. Body Composition and Obesity	2
1.3. BIA Method and Body Composition	3
1.4. Obesity and Lifestyle-related Diseases	4
1.5. Interval Training Techniques	6
1.6. Interval Training Adaptations Physiological Adaptations	7
1.7. Energy Systems and Training Intensity	8
1.8. Tabata Training	9
1.9. Objectives of the Study	12
1.10. Statement of the Problem	13
1.11. Hypotheses	13
1.12. Significance of the Study	13
1.13. Delimitations	14
1.14. Limitations	15
1.15. Meaning and Definition of the Operational Terms	15

TABLE OF CONTENTS (Contd...)

CHAPTER II REVIEW OF LITERATURE	19 - 60
2.1. Introduction	19
2.2. Studies Related to High Intensity Interval Training (HIIT) with 1:1 Work to Rest Ratio	20
2.3. Studies Related to High Intensity Interval Training (HIIT) with 1:0.5 Work to Rest Ratio	27
2.4. Studies Related to High Intensity Interval Training	32
2.5. Studies Related to Physiological Variables	36
2.6. Studies Related to Athletic Performance	46
2.7. Summary of Literature	59
CHAPER III METHODOLOGY	61 - 81
3.1. Selection of Subjects	61
3.2. Selection of Variables	62
3.3. Experimental Design	67
3.4. Selection of Tests	68
3.5. Instruments Reliability	68
3.6. Reliability of the Data	69
3.7. Orientation to the Subjects	70
3.8. Pilot Study	70
3.9. Training Programme	70
3.10. Test Administration	74
3.11. Collection of Data	79
3.12. Statistical Technique	79
CHAPTER IV RESULTS AND DISCUSSION	82 - 133
4.1. Overview	82
4.2. Test of Significance	83
4.3. Computation of Dependent 't' test, Analysis of Covariance and Scheffe's Post Hoc Test on Body Fat	85

TABLE OF CONTENTS (Contd...)

4.4.	Computation of Dependent 't' test, Analysis of Covariance and Scheffe's Post Hoc Test on VO2max	91
4.5.	Computation of Dependent 't' test, Analysis of Covariance and Scheffe's Post Hoc Test on Resting Heart Rate	97
4.6.	Computation of Dependent 't' test, Analysis of Covariance and Scheffe's Post Hoc Test on Speed	103
4.7.	Computation of Dependent 't' test, Analysis of Covariance and Scheffe's Post Hoc Test on Speed Endurance	109
4.8.	Computation of Dependent 't' test, Analysis of Covariance and Scheffe's Post Hoc Test on Agility	115
4.9.	Computation of Dependent 't' test, Analysis of Covariance and Scheffe's Post Hoc Test on Abdominal Muscular Endurance	121
4.10.	Computation of Dependent 't' test, Analysis of Covariance and Scheffe's Post Hoc Test on Arm Strength	127
4.11.	Discussion on Hypotheses	132
CHAPTER V SUMMARY CONCLUSIONS AND RECOMMENDATIONS		134 - 136
5.1.	Summary	134
5.2.	Conclusions	135
5.3.	Recommendations to the Society	136
5.4.	Recommendations to the Researchers	136
BIBLIOGRAPHY		137 - 152
	Books	137
	Journals and Proceedings	139
	Unpublished Theses	151
	Websites	152
APPENDICES		153 - 164