

TABLE OF CONTENTS

	PAGE
1 CHAPTER ONE: INTRODUCTION	
1.1 Introduction	1
1.2 Aims and Objectives	2
1.3 Limitations	3
1.4 Rationale for the Study	4
2 CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction	5
2.2 Incidence and Prevalence of Sacroiliac Syndrome	5
2.3 Anatomy of the Sacroiliac Joint	6
2.3.1 Ligaments	7
2.3.2 Muscles	7
2.3.3 Innervation	9
2.4 Biomechanics of the Sacroiliac Joint	10
2.5 Clinical Presentation and Diagnosis of Sacroiliac Syndrome	11
2.6 Anatomy of the Hip	14
2.6.1 Ligaments	14
2.6.2 Muscles	15
2.6.3 Innervation	16
2.7 The Possible Relationship between Sacroiliac Syndrome and Pressure Threshold of the Piriformis Muscle	16
2.8 The Possible Relationship between Sacroiliac syndrome and Hip Joint Range of Motion	17
2.9 The Possible Relationship between Sacroiliac Syndrome and Hip Joint Proprioception	19
2.10 Sacroiliac Joint Manipulation and its Hypothesized Effect on Hip Joint Functional Ability	22

3 CHAPTER THREE: MATERIALS AND METHODS

3.1	Introduction	24
3.2	Design	24
3.3	The Sample	24
	3.3.1 Advertising	24
	3.3.2 Sampling method and size	24
	3.3.3 Sample allocation / randomization	24
	3.3.4 Telephonic interview	25
3.4	Clinical procedure	25
	3.4.1 Inclusion criteria	25
	3.4.2 Exclusion criteria	26
3.5	Clinical evaluation	27
3.6	Intervention	28
3.7	Measurements	30
	3.7.1 Subjective Measurements	30
	3.7.2 Objective Measurements	30
3.8	Statistical Analysis	32

4 CHAPTER FOUR: RESULTS AND DISCUSSION

4.1	Introduction	34
4.2	Demographic Data	34
4.3	Follow up over time	36
4.4	First Objective: Subjective Clinical Findings	37
	4.4.1 Pain (NRS)	37
	4.4.2 Revised Oswestry Low Back Pain and Disability Questionnaire	40

	PAGE
4.5 Second Objective: Objective Clinical Findings	44
4.5.1 Hip Joint Range of Motion	44
4.5.1.1 Flexion	44
4.5.1.2 Extension	49
4.5.1.3 Abduction	53
4.5.1.4 Adduction	57
4.5.1.5 Internal Rotation	60
4.5.1.6 External Rotation	65
4.5.2 Hip Joint Position Sense (Proprioception)	71
4.5.2.1 10° Internal Rotation	71
4.5.2.2 10° External Rotation	74
4.5.2.3 20° Internal Rotation	77
4.5.2.4 20° External Rotation	81
4.5.3 Pressure Threshold of the Piriformis Muscle	84
5 CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS	
5.1 Conclusions	88
5.2 Recommendations	91
REFERENCES	93
APPENDICES	100