

TABLE OF CONTENTS

TITLE PAGE	i
ABSTRACT	ii
ABSTRAK	iii-iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi-viii
LIST OF TABLES	ix
LIST OF FIGURES	x-xi

CHAPTER1: INTRODUCTION

1.0	Introduction	1
1.1	Background	1
1.2	Statement of the Problem	3
1.3	Research Question	5
1.4	Significance of the Study	7
1.5	Scope and Limitations	8

CHAPTER TWO: REVIEW OF RELEVANT LITERATURE

2.0	Introduction	10
2.1	Vowels in Arabic and English	10
2.2	The Production of English Sounds by Native Arabic Speakers	13
2.3	English in Malaysia and the production of Vowels in Malaysian English	17
	2.3.1 Background of Malaysian English	17
	2.3.2 Production of Vowels in Malaysian English	19
2.4	Related Studies of Speech Perception	23
2.5	Discrimination and Determination of Vowel Sounds	29

CHAPTER 3: RESEARCH METHODOLOGY

3.0	Introduction	30
3.1	Subjects	30
3.2	Listener	33
3.3	The Research Instruments	37
	3.3.1 Recordings	37

3.3.2	Learner Profile	38
3.4	Data	39
3.4.1	Experiment One: Multiple-Choice Segmental Determination Test	40
3.4.2	Experiment Two: Minimal-Pair Discrimination Test	42
3.4.3	Experiment Three: Word Determination Test	44
3.5	Data Analysis	45
3.6	Summary	46

CHAPTER FOUR: FINDINGS AND DISCUSSION

4.0	Introduction	47
4.1	Experiment One	48
4.2	Experiment Two	59
4.3	Experiment Three	66
4.4	Comparison of Data from the Three Experiments	73
4.4.1	Individual Listener Differences	74
4.4.2	Contextual and Segmental Speech Perception	75
4.4.3	Comparison with Previous Findings on Arabic-Accented English	76
4.5	Summary	77

CHAPTER 5: CONCLUSION

5.0	Introduction	78
5.1	Summary of Findings	78
5.1.1	Research Question 1: To what extent are the vowels of Arabic-accented English intelligible to Malay speakers of English?	78
5.1.2	Research Question 2: Which vowels are properly perceived by native Malay speakers and which vowels are not?	79

5.2	Implications	81
5.3	Recommendations	81
5.4	Concluding Remarks	82
REFERENCES		83
APPENDIX A: Personal Information of Omani Participants		89
APPENDIX B: Learner Profile		90
APPENDIX C: Word List for Experiment One		91
APPENDIX D: Minimal pairs for Experiment Two		92
APPENDIX E: Experiment Three: Sentences		93
APPENDIX F: Confusion Matrix (frequency) for the Production of English Vowel Monophthongs of Omani Speaker of English in Experiment One		94
APPENDIX G: Confusion Matrixes (frequency) for the Production of English Vowel Monophthongs of Omani Speaker of English in Experiment Two		95

LIST OF TABLES

Table 2.1	The Vowel Phonemes of Arabic	11
Table 2.2	The Malaysian English Continuum	18
Table 2.3	Vowel Phonemes of SM	20
Table 3.1	Studying Background of the Omani Subject	32
Table 3.2	Characteristics of the Omani Subject	33
Table 3.3	Studying Backgrounds of Malay Subjects	34
Table 3.4	Characteristics of Malay Subjects	36
Table 4.1	Vowel Duration for Malaysian and Omani Speakers	53
Table 4.2	Confusion Matrix (%) for the Production of English	
	Vowel Monophthongs of Omani Speaker of English	58
Table 4.3	Correct Percentage of Individual Performance of	
	Identifications across Genders	59
Table 4.4	Correct Frequency of Individual Performance of	
	Determinations across Genders	65
Table 4.5	Correct % of perceptions of twenty Malay listeners of	
	Each Experiment	74

LIST OF FIGURES

Figure 2.1	Formant Chart of Saudi, Sudanese and Egyptian Vowels	12
Figure 2.2	Plotting Vowel Quality of English monophthongs	13
Figure 2.3	Comparison of F1 between Omani and British English Vowels	16
Figure 2.4	Comparison of F2 between Omani and British English Vowels	16
Figure 2.5	Vowel Chart for Malaysian English Vowels	21
Figure 2.6	Box Plot Comparing Duration of /ɪ/, /iː/ and /ʊ/, /uː/	22
Figure 4.1	Percentage of Correct Identifications	49
Figure 4.2	Percentage of Determination for /ɜː/	50
Figure 4.3	Comparisons of Vowels in British and Omani English	51
Figure 4.4	Percentage of Determination for /ɒ/	52
Figure 4.5	Percentage of Determination for /e/	52
Figure 4.6	Comparison of All Vowels in Omani and Malaysian English	54
Figure 4.7	Percentage of Determination for /ʌ/	54
Figure 4.8	Percentage of Determination for /ɑː/	55
Figure 4.9	Correct Percentage of Individual Performance of Identifications of English Monophthongs Produced by Omani Speaker	56
Figure 4.10	Percentage of Determination for /iː/	57
Figure 4.11	Percentage of Correct Discriminations	60
Figure 4.12	Percentage of Correct Discrimination for /uː/ and /ʊ/	61
Figure 4.13	Percentage of Correct Discrimination for /e/ and /æ/	62

Figure 4.14	Percentage of Correct Discrimination for /ʌ/ and /ɑː/	63
Figure 4.15	Percentage of Correct Discrimination for /ɪ/ and /iː/	64
Figure 4.16	Percentage of Correct Discrimination for /ɒ/ and /ɔː/	64
Figure 4.17	Percentage of Correct Determinations in Experiment Three	67
Figure 4.18	Percentage of Misdeterminations for /iː/	68
Figure 4.19	Percentage of Misdeterminations for /e/	69
Figure 4.20	Percentage of Misdeterminations for /ɒ/	70
Figure 4.21	Percentage of Misdeterminations for /ɔː/	71
Figure 4.22	Percentage of Misdeterminations for /ʊ/	71
Figure 4.23	Percentage of Misdeterminations for /uː/	72
Figure 4.24	Percentage of Misdeterminations for /ɜː/	72
Figure 4.25	Overall Percentage of Correct Perception	73