CHAPTER 7

SOCIAL AND STYLISTIC VARIATIONS OF VARIABLE (E)

7.1 INTRODUCTION

In most dialects of Malay, the phoneme $\langle \epsilon \rangle$ is always realised as tense-mid front unrounded vowel [ϵ] whether is it in word-initial, word-medial or word-final positions. Therefore, the phoneme $\langle e \rangle$ is not a common variable. However, the phoneme $\langle \epsilon \rangle$ is correspond to lax-mid back rounded vowel [\Box] in Negeri Sembilan dialect and lax-mid back unrounded vowel [\Box] in Kelantan dialect (Asmah Haji Omar, 1977). In Standard Malay, the phoneme $\langle \epsilon \rangle$ is often remained as tense-mid front unrounded vowel [ϵ]. Thus, the phoneme $\langle \epsilon \rangle$ has one allophone, the close-mid front unrounded vowel [ϵ] with the phonemic realisation as follows:

 $|\epsilon|: \rightarrow \{ [\epsilon] / _ all environments \}$

Examples:			
ekor	'tail'	:	[єко]
enak	'delicious'	:	[ενα?]
esok	'tomorrow'	:	[εσο?]
beta	'me/royal'	:	[βετ↔]
kereta	'car'	:	[κ↔ρετ↔]
Tenom	'Tenom town'	:	[τενομ]

In this study, only the phoneme $|\varepsilon|$ in only two environments, namely in the word-initial and word-medial positions will be discussed. Hence the sounds of phoneme $|\varepsilon|$ in both word-initial and word-medial positions will be enclosed in parentheses and names as 'variable (ε)' instead of using the term 'phoneme $|\varepsilon|'$. This

is mainly because the variable (ε) is not equivalent to the phoneme / ε / since it represents only the / ε / in the word-initial position such as *ekor*, *ela*, *esok* and *enak*; and word-medial position such as *beta*, *kereta*, *beza* and place name as such *Tenom*. However, variable (e) does not represent the / ε / in the word-final position as the phoneme / ε / is rarely occurred in word-final position except for loan words such as *sate* and *tauge*. Hence, the discussion of this chapter is focused on the variable (ε), which represents the word-initial / ε / and the word-medial / ε /. If references need to be made specified on either one, the term 'variable (ε) word-initial' and 'variable (ε) word-medial' will be used explicitly.

In SMD, however, the (ε) is variable in the sense that most speakers sometimes pronounced / ε / as tense-mid front unrounded vowel [ε] and other times as, mid central unrounded vowel [\leftrightarrow], low back unrounded vowel [α] and high front unrounded vowel [i] in the word-initial and medial positions. Thus, the variable (ε) has four variants: [ε], [\leftrightarrow], [α] and [ι] which are written as follow:

$$(\varepsilon) = \text{word-initial } /\varepsilon/ : \Rightarrow$$

$$(e)_{-1} = [\varepsilon]$$

$$(e)_{-2} = [\leftrightarrow]$$

$$(e)_{-3} = [\alpha]$$

$$(e)_{-4} = [\iota]$$

These symbols representing the first variant of the variable (ε) tense-mid front unrounded vowel [ε], the second variant of the variable (ε) is the mid central unrounded vowel [\leftrightarrow], the third variant of the variable (ε) is low back unrounded vowel [α] and the fourth variant of the variable (ε) is high front unrounded vowel [i]. The standard variant is the $[\varepsilon]$ variant and the rest of the variants are the non-standard. The /e/ word-initial and /e/ word-medial are alternating in SMD as follows:

Examples	8:			
en es be	cor nak rok eta	'tail' 'delicious' 'tomorrow' 'me/royal'	: :	$\begin{split} [\varepsilon \kappa \circ \rho] &\sim [\leftrightarrow \kappa \circ \rho] \sim [\alpha \kappa \circ \rho] \sim [\iota \kappa \circ \rho] \\ [\varepsilon \nu \alpha \kappa] &\sim [\leftrightarrow \nu \alpha \kappa] \sim [\alpha \nu \alpha \kappa] \sim [\iota \nu \alpha \kappa] \\ [\varepsilon \sigma \circ \kappa] &\sim [\leftrightarrow \sigma \circ \kappa] \sim [\alpha \sigma \circ \kappa] \sim [\iota \sigma \circ \kappa] \\ [\beta \varepsilon \tau \alpha] &\sim [\beta \leftrightarrow \tau \alpha] \sim [\beta \alpha \tau \alpha] \sim [bit\alpha] \end{split}$
ke	ereta	'car'	:	
[κ↔ρετο	ι]~[k↔ρ	↔τα]~[κ↔ρατα	x]~	[k↔ριτα]
Te	enom	'Tenom town'	:	[τενομ]~[τ↔νομ]~[τανομ]~[τινομ]

As the variable (ϵ) is also not a common feature in SMD, it is not found in some of the speech of the informants involved. In word-initial position, variable (ϵ) is found in the speeches of all the 90 participants who were involved in WLS and RPS. It is absent in the speech of 84 informants involved in FS and 19 informants involved in CS. Thus, this variable is only present in the speech of 24 informants in FS and 19 informants in CS. For word-medial position, variable (ϵ) is found in the speech of all the 90 participants who were involved in WLS and RPS. It is also found in the speech of 104 informants involved in CS and 107 informants in CS. However, this variable is found missing in the speech of 4 informants in FS and only 1 in CS.

Based on Table 7.1, variable (ε) is variably realised either as [ε], [\leftrightarrow] or [i] in word-initial position with the percentage mean of 96.35, 0.16 and 3.49% respectively, The variable (ε) does not realised as [α] in WLS. However, in RPS, the percentage mean of variable (ε) realised as [ε], [\leftrightarrow] and [ι] are 92.91, 1.11 and 5.98% respectively, The Variable (ε) does not realised as [α]. In FS, the percentage mean of variable (ε) variable (ε) does not realised as [α]. In FS, the percentage mean of variable (ε) variable (ε) does not realised as [α]. In FS, the percentage mean of variable (ε) variably realised as [ε], [\leftrightarrow] and [ι] in word-initial position are 82.79, 1.04 and 16.17% respectively. The variable (ε) does not realised as [α]. On the other hand,

in CS the percentage mean of variable (ε) realised as [ε], [α] and [ι] are 86.93, 2.11 and 10.96% respectively. The variable (ε) does not realised as [\leftrightarrow] in CS. This shows that the word-initial /e/ is realised the highest as [e] (82.79-96.35%); and less as [i] (3.49-16.17%); and the least as [a] (zero-2.11%) and [\leftrightarrow] (zero-1.11%)

Stylistic Variation	Variant	Ν	Min	Max	Mean	Standard Deviation
WLS	(ε) - $_1 = [\varepsilon]$	90	0	100	96.35	14.13
	$(\varepsilon) \text{-}_2 = [\leftrightarrow]$	90	0	14.29	0.16	1.51
	(ε) -3 = $[\alpha]$	90	0	0	0.00	0.00
	(ε) -4 = [i]	90	0	100	3.49	14.09
RPS	(ε) - $_1 = [\varepsilon]$	90	0	100	92.91	19.01
	$(\varepsilon) \text{-}_2 = [\leftrightarrow]$	90	0	33.33	1.11	6.02
	(ε) -3 = $[\alpha]$	90	0	0	0.00	0.00
	(ε) -4 = [i]	90	0	100	5.98	18.40
FS	(ε) - $_1 = [\varepsilon]$	24	0	100	82.79	33.34
	$(\varepsilon) \text{-}_2 = [\leftrightarrow]$	24	0	25	1.04	5.10
	(ε) -3 = $[\alpha]$	24	0	0	0.00	0.00
	(ε) -4 = [i]	24	0	100	16.17	33.47
CS	(ε) - $_1 = [\varepsilon]$	19	0	100	86.93	28.95
	$(\varepsilon) \text{-}_2 = [\leftrightarrow]$	19	0	0	0.00	0.00
	(ε) -3 = $[\alpha]$	19	0	40	2.11	9.18
	(ε) -4 = [i]	19	0	75	10.96	23.16

Table 7.1: Descriptive Statistics of Variable (ε) Word-Initial

Table 7.2 shows in word-medial position, variable (ε) is variably realised either as [ε], [\leftrightarrow], [α] or [ι] with the percentage means of 92.95, 2.72, 0.12 and 4.21% respectively in WLS. In RPS, the percentage mean of variable (ε) realised as [ε], [\leftrightarrow], [α] and [ι] are 94.87, 1.58, 0.05 and 3.50% respectively. In FS, the percentage mean of variable (ε) realised as [ε], [\leftrightarrow], [α] and [ι] are 75.40, 0.63, 0.40 and 23.57% respectively. While in CS, the percentage mean of variable (ε) realised as [ε], [\leftrightarrow], [α] and [ι] are 71.02, 0.92, 0.75 and 27,32% respectively. This shows that the word-medial /e/ is realised the highest as [e] (71.02-94.87%); and less as [i] (3.50-27.32%); and the least as [\leftrightarrow] (0.63-2.72%) and [a] (0.05-0.70%).

Stylistic Variation	Variant	Ν	Min	Max	Mean	Standard Deviation
WLS	(ε) - $_1 = [\varepsilon]$	90	0	100	92.95	15.58
	$(\varepsilon)2 = [\longleftrightarrow]$	90	0	22.22	2.72	5.08
	(ε) -3 = $[\alpha]$	90	0	11.11	0.12	1.17
	(ε) -4 = [i]	90	0	88.89	4.21	13.90
RPS	(ε) - $_1 = [\varepsilon]$	90	31.82	100	94.87	11.39
	$(\varepsilon)2 = [\longleftrightarrow]$	90	0	9.09	1.58	2.30
	(ε) -3 = $[\alpha]$	90	0	4.76	0.05	0.50
	(ε) -4 = [i]	90	0	68.18	3.50	11.20
FS	(ε) - $_1 = [\varepsilon]$	104	0	100	75.40	29.10
	$(\varepsilon) \text{-}_2 = [\leftrightarrow]$	104	0	23.08	0.63	3.07
	(ε) -3 = $[\alpha]$	104	0	14.29	0.40	2.35
	(ε) -4 = [i]	104	0	100	23.57	28.38
CS	(ε) - $_1 = [\varepsilon]$	107	0	100	71.02	29.23
	$(\varepsilon) \text{-}_2 = [\leftrightarrow]$	107	0	18.18	0.92	2.89
	(ε) -3 = $[\alpha]$	107	0	20	0.75	3.20
	(ε) -4 = [i]	107	0	100	27.32	29.19

Table 7.2: Descriptive Statistics of Variable (ɛ) Word-Medial

7.2 VARIABLE (ε) AND GENDER

(a) WORD-INITIAL /e/

This study finds that in word-initial position, both gender groups use the highest amount of $[\varepsilon]$ and a medium amount of $[\iota]$ for word-initial /e/ for all stylistic variations. However, they use a little amount or none of $[\leftrightarrow]$ and [a] in the different stylistic variations.

Stylistic Variation	Variant	Male	Female
WLS	(ε) - $_1 = [\varepsilon]$	93.21	98.86
	$(\varepsilon)2 = [\leftrightarrow]$	0.00	0.29
	(ε) -3 = $[\alpha]$	0.00	0.00
	(ε) - ₄ = [1]	6.79	0.86
RPS	(ε) - $_1 = [\varepsilon]$	89.05	96.00
	$(\varepsilon)2 = [\leftrightarrow]$	0.00	2.00
	(ε) -3 = $[\alpha]$	0.00	0.00
	(ε) - ₄ = [1]	10.95	2.00
FS	(ε) - $_1 = [\varepsilon]$	75.27	91.67
	$(\varepsilon)2 = [\leftrightarrow]$	0.00	2.27
	(ε) -3 = $[\alpha]$	0.00	0.00
	(ε) - ₄ = [1]	24.73	6.06
CS	(ε) -1 = $[\varepsilon]$	86.52	87.50
	(ε) -2 = $[\leftrightarrow]$	0.00	0.00

Table 7.3: Percentage Means of Variable (ε) Word-Initial by Gender and Stylistic Variation

(ε) -3 = $[\alpha]$	0.00	5.00
$(\varepsilon)4 = [\iota]$	13.48	7.50

Males use [e] between 75.27 and 93.21% and [1] between 6.79 and 24.78% of the time in different stylistic variations. Females use [e] between 87.5 and 98.86%, [1] between 0.86 and 7.5%, [\leftrightarrow] between zero and 2.27%, [a] between zero and 0.5% of the time in different stylistic variations.

Between the two genders, males use a higher percentage of [1] and a lower percentage of [e] for word-initial /e/ for all the four stylistic variations. Female use a higher percentage of $[\varepsilon]$ and the lowest percentage of [i] in all the four stylistic variations.

In word-initial position, variable (e) realised as $[\leftrightarrow]$ and [a] by gender are not correlated with stylistic variation. However, variable (e) realised as $[\varepsilon]$ and $[\iota]$ by gender are minimally correlated with stylistic variation. The percentages use of $[\varepsilon]$ is consistently drop in the less formal style especially for female. Both genders use [e] at 93.21 and 98.86% respectively in WLS. These percentages decrease slightly to 89.05 and 96% respectively in RPS. The percentages are then further decreased to 75.27 and 91.67% respectively in FS. The percentages of [e] by males increase to 86.52 and by females decrease to 87.5% respectively in CS.

The indices for variable (e) by gender and stylistic variation lie between the scores of 102.88 and 174.19 as shown in Figure 7.1. These index scores of variable (e) correspond to the use between (e)-₁ and (e)-₂, which are the [e] and [\leftrightarrow] variants.

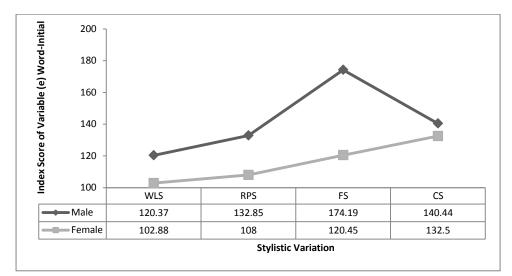


Figure 7.1: Index Score of Variable (ɛ) Word-Initial by Gender and Stylistic Variation

The variable (e) is subject a little to gender differentiation. This is shown by the wide space between the two gender lines especially in WLS, RPS and FS. This is also supported by the percentage difference of variable (e) realised as $[\varepsilon]$, $[\leftrightarrow]$ and $[\alpha]$ word-initially between two genders in different stylistic variations which is significant at 5% level (p<0.05) especially when variable (e) realised as $[\iota]$ in FS, where males use significant more of [i] than females as testified by the Independent-Samples T-Test(see Appendix Ei).

However, the variable (e) is not subject to stylistic differentiation, as the movements of all the gender lines consistently rise in the less formal style, particularly the males. Furthermore, percentage difference of variable (e) realised as $[\varepsilon]$, $[\leftrightarrow]$, [a] and $[\iota]$ word-initially from one stylistic variation to another are insignificant at 5% level (*p*>0.05) as tested by the Paired-Samples T-Test (see Appendix Eii).

Thus, the variable (ϵ) is correlated with gender variation but not stylistic variation in word-initial position. The variable (e) is an indicator in the speech community of SMD as it has little consequential role in the marking of gender differences especially in more formal stylistic variation of WLS, RPS and FS.

(b) WORD-MEDIAL /e/

This study finds that both gender groups use the most amount of $[\varepsilon]$, a little amount of $[\iota]$ and $[\leftrightarrow]$ and none of [a] for word-medial /e/ for all stylistic variations.

Stylistic Variation	Variant	Male	Female
WLS	(ε) - $_1 = [\varepsilon]$	92.47	93.33
	$(\varepsilon)2 = [\longleftrightarrow]$	2.22	3.11
	(ε) -3 = $[\alpha]$	0.28	0.00
	(ε) - ₄ = [1]	5.03	3.56
RPS	(ε) - $_1 = [\varepsilon]$	92.34	96.89
	(ε) -2 = [\leftrightarrow]	1.73	1.46
	(ε) - ₃ = $[\alpha]$	0.12	0.00
	(ε) - ₄ = [1]	5.81	1.64
FS	(ε) - $_1 = [\varepsilon]$	73.16	77.10
	(ε) -2 = [\leftrightarrow]	1.07	0.29
	(ε) - ₃ = $[\alpha]$	0.61	0.24
	(ε) - ₄ = [1]	25.15	22.37
CS	(ε) - $_1 = [\varepsilon]$	73.37	69.18
	(ε) -2 = [\leftrightarrow]	0.76	1.04
	(ε) -3 = $[\alpha]$	0.44	0.98
	(ε) - ₄ = [1]	25.43	28.80

Table 7.4: Percentage Means of Variable (ε) Word-Medial by Gender and Stylistic Variation

Males use [e] between 73.16 and 92.47%, [1] between 5.03 and 25.43%, $[\leftrightarrow]$ between 0.76 and 2.22%, and [α] between 0.12 and 0.61% of the time in different stylistic variations. Females use [e] between 69.18 and 96.89%, [1] between 1.64 and 28.8%, [\leftrightarrow] between 0.29 and 3.11%, and [α] between zero and 0.98% of the time in different stylistic variations.

Between the two genders, Males use a higher percentage of $[\varepsilon]$ variant in FS and CS, higher percentage of $[\iota]$ variant in WLS, RPS and FS and higher percentage of $[\leftrightarrow]$ variant in RPS and FS. However, they use a lower percentage of [a] as compared to females in all the four stylistic variations. Females use a higher percentage of $[\varepsilon]$ in WLS and RPS, higher percentage of $[\iota]$ in CS and higher percentage of $[\leftrightarrow]$ in WLS and CS than males. However, they also use a higher percentage of [a] in /e/ wordmedial for all the four stylistic variations.

The indices for variable (e) by gender and stylistic variation lie between the scores of 106.37 and 189.4 as shown in Figure 7.2. These index scores of variable (e) correspond to the use between (e)-1 and (e)-2, which are the [e] and [\leftrightarrow] variants.

The variable (ε) is not subject to gender differentiation, as the lines overlapping each other and the narrow space separating the lines for males and females. In wordmedial position, the variable (e) realised as [e], [\leftrightarrow], [α] and [ι] word-medially does not correlate with gender variation. This is proven by the percentage difference of variable (e) as [ε], [\leftrightarrow], [a] and [ι] word-medially which are too small and insignificant at 5% level (p>0.05) as justified by the Independent-Samples T-Test (see Appendix Eiii).

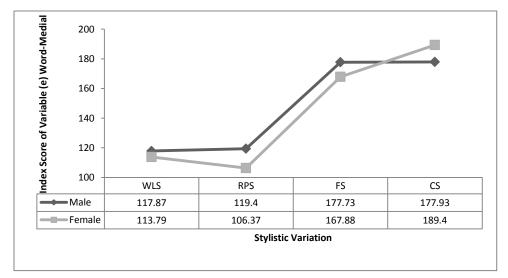


Figure 7.2: Index Score of Variable (ɛ) Word-Medial by Gender and Stylistic Variation

However, the variable (ϵ) is subject a little to stylistic differentiation, as all of gender lines consistently rise in the less formal style where the less formal the style,

the further it moves away from the standard variant. The percentage difference of variable (e) realised as $[\varepsilon]$, $[\leftrightarrow]$, [a] and $[\iota]$ word-medially from one stylistic variation to another, particular between RPS-FS are significant at 5% level (p<0.05) as tested in the Paired-Samples T-Test (see Appendix Eiv).

Consequently, the variable (ϵ) does not correlate with both gender and stylistic variations in word-medial position. The variable (e) is neither a marker nor an indicator in the speech community of SMD as it has no consequential role in the marking of gender differences. There is no significant difference between the speech of males and females with regard to the use of variable (e) in SMD.

7.3 VARIABLE (ε) AND AGE

(a) WORD-INITIAL /e/

This study finds that in word-initial position, all age groups use the most amount of the $[\varepsilon]$ variant, a medium amount of the $[\iota]$ variant, and a little amount or none of the $[\leftrightarrow]$ and [a] variants in all stylistic variations. All the age groups use [e] between 32.38 and 100%, followed by [i] between zero and 67.62%, $[\leftrightarrow]$ between zero and 3.13%, and [a] between zero and 5% in different stylistic variations.

by Age and Stylistic Variation										
Stylistic Variation	Variant	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs				
WLS	(ε) - $_1 = [\varepsilon]$	99.60	99.49	94.80	53.57					
	(ε)- ₂ = [↔]	0.00	0.51	0.00	0.00					
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00					
	(ε) - ₄ = $[\iota]$	0.40	0.00	5.20	46.43					
RPS	(ε) - $_1 = [\varepsilon]$	98.02	94.05	90.91	50.00					
	(ε)- ₂ = [↔]	0.93	1.19	1.52	0.00					

Table 7.5: Percentage Means of Variable (ε) Word-Initial by Age and Stylistic Variation

	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00	•
	(ε) - ₄ = [ι]	1.05	4.76	7.58	50.00	
FS	(ε) - $_1 = [\varepsilon]$	100.00	90.63	100.00		32.38
	(ε)- ₂ = [↔]	0.00	3.13	0.00		0.00
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00		0.00
	(ε) - ₄ = $[\iota]$	0.00	6.25	0.00		67.62
CS	(ε) - $_1 = [\varepsilon]$	100.00	92.00	87.50	66.67	75.00
	(ε)- ₂ = [↔]	0.00	0.00	0.00	0.00	0.00
	(ε) -3 = $[\alpha]$	0.00	0.00	5.00	0.00	0.00
_	(ε) - ₄ = [ι]	0.00	8.00	7.50	33.33	25.00
-						

The youngest age group of 15-24 year olds uses the highest percentage of $[\varepsilon]$ among all the age groups in all stylistic variations. This also means that this age group uses [i], [\leftrightarrow] and [a] the least in all stylistic variation among all the age groups. The 25-34 year olds age group uses the highest percentage of [\leftrightarrow] in WLS and FS, and [α] in CS. The age group of 35-44 year olds uses the highest percentage of [ε] along with the youngest age group in RPS and also the highest percentage of [α] in CS. The age group in RPS and also the highest percentage of [α] in CS. The age group in RPS and also the highest percentage of [α] in CS. The age group of 45-54 year olds uses the lowest percentage of [ε] in almost all stylistic variations except in FS where the variable (e) is absent. Thus, this age group uses the most [i] among all the age groups in WLS, RPS and CS. The oldest age group of 55-64 year olds uses the least of [ε] but the most [i] among all the age groups in FS.

The indices for variable (e) by age and stylistic variation lie between the scores of 100 and 302.86 as shown in Figure 7.3. These index scores correspond to the use of the (e)-₁ which is the [ε] variant for the younger age groups; and the use between (e)-₂ and (e)-₃, which are the [ε] and [a] variants for the older age groups.

The variable (e) is subject to age differentiation in word-initial position. Although the younger age group lines entangle each other, the two older age group lines are well space out from the younger ones. This is supported by significant percentage differences at the 5% level (p<0.05) of variable (e) realised as [e], [\leftrightarrow], [α] and [ι] word-initially between one age group and another in different stylistic variation are especially the [ι] and [α] between the older (45-64 year olds) and the younger (15-44 year olds) age groups in RPS, FS and CS as tested by One-Way ANOVA Test (see Appendix Ev).

However, the variable (e) is not subject to stylistic differentiation, as all the age lines are relatively level instead of rising or dropping consistently in the less formal style. Moreover, the percentages difference of variable (e) realised as [ϵ], [\leftrightarrow], [a] and [1] word-initially are insignificant at the 5% level (*p*>0.05) as tested by Paired-Samples T-Test (see Appendix Evi).

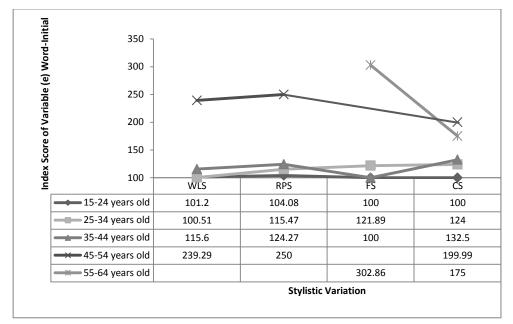


Figure 7.3: Index Score of Variable (ɛ) Word-Initial by Age and Stylistic Variation

It can be concluded that the variable (ε) is correlated with age variation but not to stylistic variation in word-initial position. Thus the variable (ε) is an indicator in the speech community of SMD. It has some consequential role in the marking of age differences between the older (45-64 year olds) and the younger age groups (15-44 year olds). However, it has difficulties in marking of age differences within the younger age groups as well as within the older ones.

(b) WORD-MEDIAL /e/

In word-medial position, all age groups use the most amount of the [ϵ] variant, a medium amount of the [ι] variant, and a little amount or none of the [\leftrightarrow] and [a] variants in all stylistic variations. All the age groups use [e] between 36.91 and 98.10%, followed by [i] between 0.51 and 62.80%, [\leftrightarrow] between zero and 4.55%, and [a] between zero and 1.59% in different stylistic variations.

Stylistic	Variant		a Stylistic		45 54	55 ()
Variation	Variant	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs
WLS	(ε) - $_1 = [\varepsilon]$	95.33	95.24	91.92	61.11	
	$(\varepsilon)-2 = [\leftrightarrow]$	1.85	2.38	4.55	2.78	
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	2.78	
	(ε) - ₄ = $[\iota]$	2.82	2.38	3.54	33.33	
RPS	(ε) - $_1 = [\varepsilon]$	98.10	96.90	92.31	65.69	
	(ε)- ₂ = [↔]	1.40	1.31	2.31	1.19	
	(ε) -3 = $[\alpha]$	0.00	0.17	0.00	0.00	
	(ε) - ₄ = $[\iota]$	0.51	1.62	5.38	33.12	
FS	(ε) - $_1 = [\varepsilon]$	87.04	78.07	79.68	53.56	40.43
	(ε)- ₂ = [↔]	0.56	1.66	0.29	0.00	0.00
	(ε) -3 = $[\alpha]$	0.00	0.56	0.46	0.00	1.43
	(ε) - ₄ = [ι]	12.40	19.72	19.57	46.44	58.15
CS	(ε) - $_1 = [\varepsilon]$	81.95	77.88	72.57	51.26	36.91
	$(\epsilon)-2 = [\leftrightarrow]$	1.61	1.08	0.53	0.26	0.29
	(ε) -3 = $[\alpha]$	0.10	1.00	1.20	1.59	0.00
	(ε) - ₄ = $[\iota]$	16.34	20.03	25.71	46.90	62.80

Table 7.6: Percentage Means of Variable (ε) Word-Medial by Age and Stylistic Variation

Among all the age groups, the youngest age group of 15-24 year olds uses the highest percentage of $[\varepsilon]$ in all stylistic variations. This also means that this age group

uses least of [i], [\leftrightarrow] and [a] in all stylistic variation. The 25-34 year olds age group uses the highest percentage of [\leftrightarrow] in FS, and [α] in RPS as compared to the other age groups. The age group of 35-44 year olds uses the highest percentage of [\leftrightarrow] in WLS and RPS. The age group of 45-54 year olds uses the lowest percentage of [e], thus they use the highest percentage of [i] in WLS and RPS. This age group also use the most [a] in WLS and CS as compared to other age groups. This oldest age group of 55-64 year olds uses the least of [ϵ] but the most [i] among all the age groups in both FS and CS. They also use the most [a] in FS as compared to other age groups.

The indices for variable (e) by age and stylistic variation lie between the scores of 102.94 and 288.69 as shown in Figure 7.4. These index scores correspond to the use between the (e)-₁ and (e)-₂ which are the $[\varepsilon]$ and $[\leftrightarrow]$ variants for the younger age groups (15-44 year olds); and between the use of the (e)-₂ and (e)-₃ which are the $[\leftrightarrow]$ and [a] variants for the younger age groups (45-64 year olds).

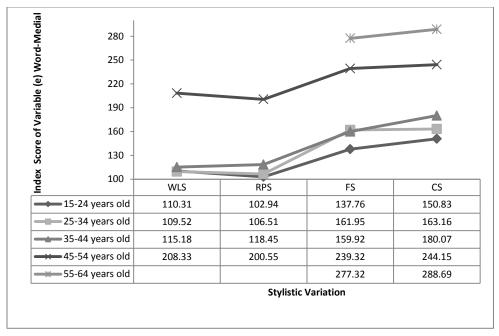


Figure 7.4: Index Score of Variable (ɛ) Word-Medial by Age and Stylistic Variation

The variable (e) is subject to age differentiation in word-initial position. Although the younger age group lines overlapping each other, the two older age group lines are well space out from each other and the younger ones. This is supported by the percentage differences of the variable (e) realised as [e], [\leftrightarrow], [α] and [1] wordmedially between one age group and another in different stylistic variation which are significant at the 5% level (p<0.05), especially variable (e) realised as [1] and [α] between the older (45-64 year olds) and the younger (15-44 year olds) age groups in RPS, FS and CS as tested by One-Way ANOVA Test (see Appendix Evii).

Similarly, the variable (e) is also subject to stylistic differentiation. Thus, all the age lines seem to rise in the less formal style. The percentages difference of variable (e) realised as $[\varepsilon]$, $[\leftrightarrow]$, [a] and $[\iota]$ word-medially are significant at the 5% level (p<0.05) as tested by Paired-Samples T-Test (see Appendix Eviii).

Therefore, the variable (ε) is correlated with age and stylistic variations in word-medial position. Thus the variable (ε) is a marker with a little stylistic variation between formal and less formal styles in the speech community of SMD. It has some consequential role in the marking of age differences between the older (45-64 year olds) and the younger age groups (15-44 year olds), although it has difficulties in marking of age differences within the younger age groups and also the older ones.

7.4 VARIABLE (ε) AND ETHNIC MEMBERSHIP

(a) WORD-INITIAL /e/

This study finds that in word-initial position, all ethnic groups use the most percentage of the $[\varepsilon]$ variant, the medium percentage of the $[\iota]$ variant and the least percentage or none of the $[\leftrightarrow]$ variant and [a] variant in all stylistic variations. All ethnic groups use

[e] between 88.83 and 100%, followed by [i] between zero and 29.76%, [\leftrightarrow] between zero and 5.56%, and [a] between zero and 5.71% in different stylistic variations.

	by E	Ethnic M	embersh	ip and St	ylistic V	ariation		
Stylistic Variation	Variant	MLY	KDZ	BJU	BGS	BMP	CHN	ONB
WLS	(ε) - $_1 = [\varepsilon]$	92.06	94.01	100.00	100.00	100.00	100.00	
	(ε)- ₂ = [↔]	0.79	0.00	0.00	0.00	0.00	0.00	
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00	0.00	0.00	
	(ε) -4 = [i]	7.14	5.99	0.00	0.00	0.00	0.00	•
			Table	7.7, con	t.			
Stylistic Variation	Variant	MLY	KDZ	BJU	BGS	BMP	CHN	ONB
RPS	(ε) - $_1 = [\varepsilon]$	88.89	88.17	98.11	100.00	94.45	100.00	
	(ε)- ₂ = [↔]	0.00	1.08	1.67	0.00	5.56	0.00	
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00	0.00	0.00	
	(ε) - ₄ = [i]	11.11	10.75	0.23	0.00	0.00	0.00	
FS	(ε) - $_1 = [\varepsilon]$	83.33	67.11	90.00	100.00	100.00	100.00	100.00
	(ε)- ₂ = [↔]	0.00	3.13	0.00	0.00	0.00	0.00	0.00
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(ε) -4 = [i]	16.67	29.76	10.00	0.00	0.00	0.00	0.00
CS	(ε) - $_1 = [\varepsilon]$	100.00	70.24	60.00	100.00	100.00	100.00	100.00
	(ε)- ₂ = [↔]	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(ε) -3 = $[\alpha]$	0.00	5.71	0.00	0.00	0.00	0.00	0.00
	(ε) -4 = [i]	0.00	24.05	40.00	0.00	0.00	0.00	0.00

Table 7.7: Percentage Means of Variable (ε) Word-Initial by Ethnic Membership and Stylistic Variation

Among all the ethnic groups, MLY uses the least of [e] in WLS; and the most of [\leftrightarrow] in WLS and [i] in WLS and RPS. KDZ uses the lowest percentage of [ϵ] in RPS and FS and the highest percentage of [i] and [\leftrightarrow] in FS. BJU uses the lowest percentage of [e], and thus the highest of [i] in FS.

The indices for variable (ϵ) by ethnic membership and stylistic variation lie between the scores of 100 and 192.41 as shown in Figure 7.5. These index scores of variable (ϵ) in word-initial position correspond to the use between the use of (ϵ)-₁, and (e)-₂, which are the [ϵ] and [\leftrightarrow] variants.

The variable (ε) is not subject to ethnic group differentiation, as shown by the over lapping lines and the narrow space separating the ethnic lines especially in WLS and RPS. This is supported by the insignificant percentage differences at the 5% level (*p*>0.05) of variable (e) realised as [e], [\leftrightarrow], [α] and [ι] word-initially between one ethnic group and another in different stylistic variation as tested by One-Way ANOVA Test (Appendix Eix).

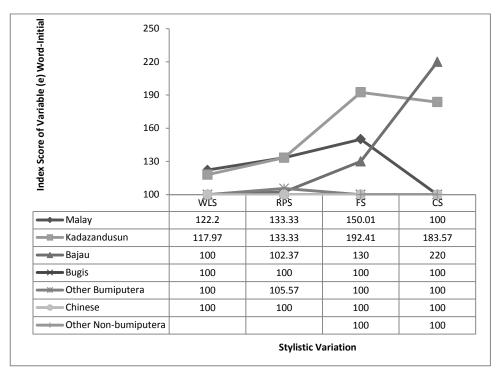


Figure 7.5: Index Score of Variable (ε) Word-Initial by Ethnic Membership and Stylistic Variation

Similarly, the variable (e) is not subject to stylistic differentiation, as most of the ethnic lines are not consistently rise in the less formal styles except for BJU. Furthermore, the percentages difference of variable (e) realised as $[\varepsilon], [\leftrightarrow], [a]$ and $[\iota]$ word-initially by ethnic group between one stylistic variation and another are insignificant at the 5% level (p>0.05) as tested by Paired-Samples T-Test (Appendix Ex).

As the variable (ε) does not correlate with ethnic group variation or stylistic variation in word-initial position, thus the variable (ε) is neither a marker nor an indicator in the speech community of SMD. It has no consequential role in the marking of ethnic differences. Thus, there is no significant difference between the speech of different ethnic groups with regard to the use of variable (ε) word-initial in SMD.

(b) WORD-MEDIAL /e/

This study finds that in word-medial position, all ethnic groups use the most amount of the [ϵ] variant, the medium amount of the [ι] variant and the least amount or none of the [\leftrightarrow] variant and [a] variant in all stylistic variations. All ethnic groups use [e] between 60.82 and 98.48%, followed by [i] between zero and 37.96%, [\leftrightarrow] between zero and 4.76%, and [a] between zero and 2.63% in different stylistic variations.

	by Et	hnic Me	embershi	p and St	tylistic V	⁷ ariation	l	
Stylistic Variation	Variant	MLY	KDZ	BJU	BGS	BMP	CHN	ONB
WLS	(ε) - $_1 = [\varepsilon]$	91.90	91.76	96.11	97.22	96.30	84.13	•
	$(\epsilon)-2 = [\leftrightarrow]$	1.23	3.23	2.22	2.78	3.70	4.76	
	(ε)- ₃ = [α]	0.62	0.00	0.00	0.00	0.00	0.00	
	(ε) - ₄ = [i]	6.25	5.02	1.67	0.00	0.00	11.11	
RPS	(ε) - $_1 = [\varepsilon]$	92.35	92.80	98.16	95.43	98.48	97.40	
	$(\varepsilon)2 = [\leftrightarrow]$	1.81	1.18	1.39	3.98	0.00	1.95	
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.60	0.00	0.00	
	(ε) - ₄ = [i]	5.85	6.02	0.46	0.00	1.52	0.65	
FS	(ε) - $_1 = [\varepsilon]$	71.27	60.82	78.59	96.26	85.37	82.18	85.46
	(ε)- ₂ = [↔]	0.48	0.78	0.50	0.00	2.78	0.00	0.55

Table 7.8: Percentage Means of Variable (ε) Word-Medial by Ethnic Membership and Stylistic Variation

	(ε) - ₄ = [i]	27.64	35.48	29.38	5.96	28.48	21.69	22.14
	(ε) -3 = $[\alpha]$	0.00	1.08	0.83	0.00	2.63	0.00	0.96
	(ε)- ₂ = [↔]	1.28	0.95	0.37	2.49	0.36	0.68	0.48
CS	(ε) - $_1 = [\varepsilon]$	71.08	62.49	69.43	91.56	68.52	77.64	76.42
	(ε) - ₄ = [i]	27.30	37.96	20.91	3.74	11.85	16.24	13.99
	(ε) -3 = $[\alpha]$	0.95	0.45	0.00	0.00	0.00	1.59	0.00

Among all the ethnic groups, MLY uses the least of [e] in RPS; and the most of $[\alpha]$ in WLS. KDZ uses the lowest percentage of $[\varepsilon]$ in FS and CS. However, this ethnic group uses the highest percentage of [i] in RPS, FS and CS. BGS uses the highest percentage of $[\varepsilon]$ in WLS, FS and CS. On the other hand, this ethnic group uses the highest percentage of [a] and $[\leftrightarrow]$ in RPS. BMP uses the highest percentage of $[\varepsilon]$ in WLS. However, this ethnic group uses the highest percentage of $[\alpha]$ and $[\leftrightarrow]$ in RPS. BMP uses the highest percentage of $[\varepsilon]$ in WLS. However, this ethnic group uses the highest percentage of $[\varepsilon]$ in FS and $[\alpha]$ in CS. CHN uses the lowest percentage of $[\varepsilon]$ in WLS. However, this ethnic group uses the highest percentage of $[\varepsilon]$ in FS.

The indices for variable (ε) by ethnic membership and stylistic variation lie between the scores of 102.78 and 215.17 as shown in Figure 7.6. These index scores of variable (ε) in word-initial position correspond to the use between (ε)-₁ and (e)-₂, which are the [ε] and [\leftrightarrow] variants.

The variable (ε) is subject to ethnic group differentiation, as ethnic lines are quite distinctive especially in less formal styles. The percentage differences of variable (e) realised as [e], [\leftrightarrow], [α] and [1] word-medially between one ethnic group and another especially BGS from CHN, MLY, KDZ and BJU in different stylistic variation are significant at the 5% level (p<0.05) as tested by One-Way ANOVA Test (Appendix Exi).

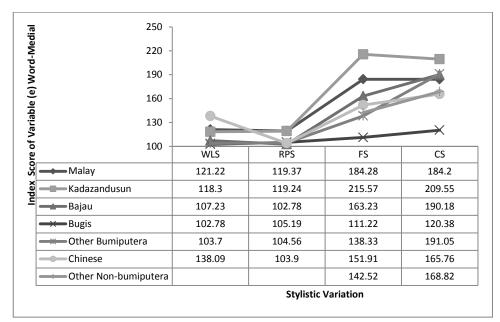


Figure 7.6: Index Score of Variable (ε) Word-Medial by Ethnic Membership and Stylistic Variation

Variable (e) is also subject to stylistic differentiation, as most of the ethnic lines rise in the less formal style. The percentages difference of variable (e) realised as $[\varepsilon]$, $[\leftrightarrow]$, [a] and [1] word-medially are significant at the 5% level (*p*<0.05) as tested by Paired-Samples T-Test (Appendix Exii).

As the variable (ε) is correlated with ethnic group variation and also to stylistic variation in word-medial position, thus the variable (ε) is marker with little stylistic variation in the speech community of SMD. It has some consequential role in the marking of ethnic differences, especially between the BGS and MLY, KDZ and BJU.

7.5 VARIABLE (E) AND SOCIAL STRATIFICATION

(a) WORD-INITIAL /e/

This study finds that in word-initial position, all social groups use the most amount of the $[\varepsilon]$ variant, the medium amount of the $[\iota]$ variant and the least amount or none of the $[\leftrightarrow]$ variant and [a] variant in all stylistic variations. All social strata use [e]

between 58.33 and 100%, followed by [i] between zero and 41.67%, [a] between zero

and 8%, and $[\leftrightarrow]$ between zero and 5% in different stylistic variations.

	by Social Stratification and Stylistic Variation								
Stylistic Variation	Variant	LWC	MWC	UWC	LMC	MMC			
WLS	(ε) - $_1 = [\varepsilon]$	97.62	93.41	99.38	99.35	91.21			
	(ε) -2 = [\leftrightarrow]	0.00	0.00	0.62	0.00	0.00			
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00	0.00			
	(ε) - ₄ = [i]	2.38	6.59	0.00	0.65	8.79			
RPS	(ε) - $_1 = [\varepsilon]$	100.00	90.85	95.65	93.94	87.18			
	(ε) -2 = [\leftrightarrow]	0.00	0.00	4.35	0.00	0.00			
	(ε) - ₃ = $[\alpha]$	0.00	0.00	0.00	0.00	0.00			
	(ε) - ₄ = [i]	0.00	9.15	0.00	6.06	12.82			
Stylistic			ble 7.9, con						
Variation	Variant	LWC	MWC	UWC	LMC	MMC			
FS	(ε) - $_1 = [\varepsilon]$	58.33	100.00	75.00	82.65	100.00			
	(ε) -2 = [\leftrightarrow]	0.00	0.00	5.00	0.00	0.00			
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00	0.00			
	(ε) -4 = [i]	41.67	0.00	20.00	17.35	0.00			
CS	(ε) - $_1 = [\varepsilon]$	65.00	83.34	100.00	90.00	100.00			
	(ε) - $_2 = [\leftrightarrow]$	0.00	0.00	0.00	0.00	0.00			
	(ε) - ₃ = $[\alpha]$	8.00	0.00	0.00	0.00	0.00			

Table 7.9: Percentage Means of Variable (ε) Word-Initial by Social Stratification and Stylistic Variation

Among all social strata, LWC uses the least of [e] and therefore the most of [1] in FS and CS. While, MMC uses the lowest percentage of [e], and thus the highest percentage of [i] in WLS and RPS.

The indices for variable (ε) by social stratification and stylistic variation lie between the scores of 100 and 225.01 as shown in Figure 7.7. These index scores of variable (ε) in word-initial position correspond the (ε)-₁, which is the [ε] variant for most social stratifications in WLS and RPS; and the use of (ε)-₂, which is the [\leftrightarrow] variant for LWC in FS and CS. The variable (ε) is not subject to social strata differentiation, as shown by the overlapping social strata lines and the narrow space separating these lines especially in WLS and RPS. This is proven by the insignificant percentage difference at the 5% level (p>0.05) of variable (e) realised as [ε], [\leftrightarrow], [a] and [ι] word-initially between social strata in most stylistic variations as tested by One-Way ANOVA Test (Appendix Exiii).

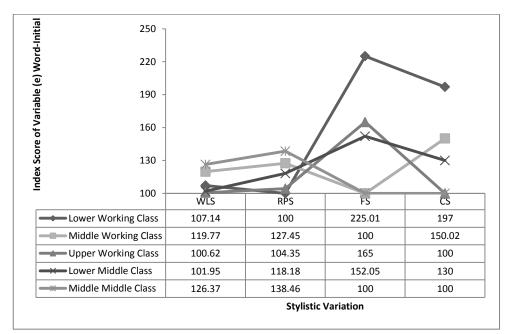


Figure 7.7: Index Score of Variable (ε) Word-Initial by Social Stratification and Stylistic Variation

In word-initial position, the variable (e) realised as $[\varepsilon]$, $[\leftrightarrow]$, [a] and $[\iota]$ variants by social stratification has no correlation with stylistic variation as most of the social strata lines are not rise in the less formal style. Furthermore, the percentage differences of variable (e) realised as $[\varepsilon]$, $[\leftrightarrow]$, [a] and $[\iota]$ word-initially by most social strata between one stylistic variation and another are insignificant at the 5% level (*p*>0.05) as tested by Paired-Samples T-Test (Appendix Exiv).

As the variable (ϵ) does not correlate with social strata variation or stylistic variation in word-initial position, it is neither a marker nor an indicator in the speech

community of SMD. It has no consequential role in the marking of social strata differences, as all social strata do not make any significant differences in the use of variable (e) word-initial in SMD.

(b) WORD-MEDIAL /e/

This study finds that in word-medial position, all social stratifications use the most amount of the [ϵ] variant, the medium amount of the [ι] variant and the least amount or none of the [\leftrightarrow] variant and [a] variant in all stylistic variations. All social strata use [e] between 56.24 and 89.21%, followed by [i] between zero and 42.08%, [\leftrightarrow] between zero and 2.56%, and [a] between zero and 1.66% in different stylistic variations.

Stylistic Variation	Variant	LWC	MWC	UWC	LMC	MMC
WLS	(ε) - $_1 = [\varepsilon]$	81.48	91.03	97.58	95.39	89.74
	$(\varepsilon)\textbf{-}_2 = [\boldsymbol{\leftrightarrow}]$	1.85	4.27	2.42	1.52	2.56
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00	0.85
	(ε) -4 = [i]	16.67	4.70	0.00	3.09	6.84
RPS	(ε) - $_1 = [\varepsilon]$	96.14	90.87	98.21	97.08	92.64
	(ε) -2 = [\leftrightarrow]	2.31	1.58	1.20	1.68	1.75
	(ε) -3 = $[\alpha]$	0.00	0.00	0.00	0.00	0.37
	(ε) -4 = [i]	1.55	7.54	0.59	1.24	5.24
FS	(ε) - $_1 = [\varepsilon]$	69.93	69.56	73.58	82.78	85.61
	(ε) -2 = [\leftrightarrow]	0.00	0.26	1.15	0.90	1.11
	(ε) -3 = $[\alpha]$	0.00	1.06	0.71	0.00	0.00
	(ε) -4 = [i]	30.07	29.12	24.55	16.32	13.28
CS	(ε) - $_1 = [\varepsilon]$	56.24	63.83	71.88	87.05	81.98
	(ε) -2 = [\leftrightarrow]	1.06	0.49	1.85	0.69	0.57
	(ε) -3 = $[\alpha]$	0.62	0.62	0.16	1.66	0.61
	(ε) -4 = [i]	42.08	35.06	26.12	10.60	16.85

Table 7.10: Percentage Means of Variable (ε) Word-Medial by Social Stratification and Stylistic Variation

Among all the social strata, LWC uses the least of [e] WLS and CS and therefore they use most of $[\iota]$ in WLS and CS as well as FS. They also use the most

 $[\leftrightarrow]$ in RPS as compared to other social groups. MWC uses the lowest percentage of $[\epsilon]$ in RPS and FS. However, this group uses the highest percentage of [i] in RPS, $[\leftrightarrow]$ in WLS and [a] in FS. UWC uses the highest percentage of $[\leftrightarrow]$ in FS and CS. LMC uses the highest percentage of $[\alpha]$ in FS. MMC uses the highest percentage of [a] in WLS and RPS.

The indices for variable (ε) by social stratification and stylistic variation lie between the scores of 102.42 and 228.54 as shown in Figure 7.8. These index scores of variable (ε) in word-medial position correspond to the use of (ε)-₁, which is the [ε] variant for most social strata in WLS and RPS; and (ε)-₂, which is the [\leftrightarrow] $\varpi \alpha \rho \iota \alpha v \tau \phi \rho most$ social strata in FS and CS.

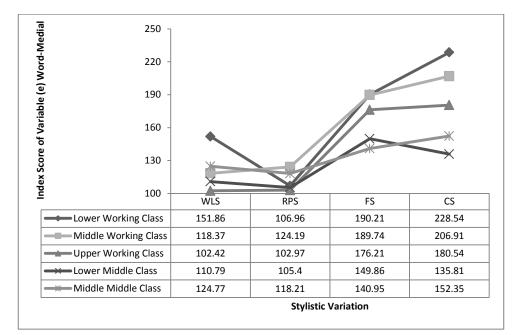


Figure 7.8: Index Score of Variable (ϵ) Word-Medial by Social Stratification and Stylistic Variation

The variable (ϵ) is subject to social strata differentiation in word-medial position, as shown by the distinctive lines of some social strata and wide space separating these lines especially between MMC and LWC. This is proven by the

significant percentage difference at the 5% level (p<0.05) of variable (e) realised as $[\varepsilon], [\leftrightarrow], [a]$ and $[\iota]$ word-medially between social strata, especially between LWC and MMC, LWC as well as LMC in CS as tested by One-Way ANOVA Test (Appendix Exv).

The variable (ε) is minimally subject to stylistic differentiation in word-medial position, most of the social strata lines are generally rise in the less formal style This is proven by the significant percentage differences at the 5% level (p<0.05) of variable (e) realised as [ε], [\leftrightarrow], [a] and [1] word-medially by most social strata between one stylistic variation and another especially between WLS-RPS and RPS-FS as tested by Paired-Samples T-Test (Appendix Exvi).

As the variable (ϵ) is correlated with social strata variation and also stylistic variation in word-medial position, it is a marker in the speech community of SMD. It has some consequential role in the marking of social strata differences especially the working classes (LWC) from the medial classes (MMC). However, it has little consequential role in marking of the social strata within working classes or within the medial classes, as they do not make significant difference in the use of variable (e) in SMD.

7.6 CONCLUSION

In conclusion, the variable (e) is realised the most as [ϵ] variant, less as the [ι] variant, and the least as the [a] and [i] variants by most of the informants of SMD in the city of Kota Kinabalu. The variable (e) is realised as the [e] variant ranging from zero to 100%, the [\leftrightarrow] variant ranging from zero to 33.33, the [a] variant ranging from zero to 40%, and the [ι] variant ranging from zero to 100 % in word-initial position. In wordmedial position, the variable (e) is realised as the [e] variant ranging from zero to 100%, the [\leftrightarrow] variant ranging from zero to 22.22, the [a] variant ranging from zero to 20%, and the [1] variant ranging from zero to 100 %. The indices for the variable (ϵ) range between the score of 100 and 302.86 in word-initial position; and between the score of 100 and 288.69 in word-medial position.

In most word-initial cases, the speech community of SMD would pronounce $\langle \epsilon \lambda \alpha \rangle$ 'yard', $\langle \text{ekor} \rangle$ 'tail' and $\langle \text{elok} \rangle$ 'nice' as [ela], [ekor] and [elok] or as [\leftrightarrow la], [\leftrightarrow kor] and [\leftrightarrow lok] unconsciously. In word-medial position, the speech community of SMD would most likely to pronounce $\langle \kappa \leftrightarrow \rho \epsilon \tau \alpha \rangle$ 'car' as [$\kappa \leftrightarrow \rho \epsilon \tau \alpha$] or [$\kappa \leftrightarrow \rho \iota \tau \alpha$]. However, the variable (e) is correlated with the social variations of gender in word-initial position; age in both word-initial and medial positions; and ethnic membership and social stratification in word-medial position.

The age group 25-44, the ethnic of BGS and the social stratum of MMC tend to use more of the standard variant of [e] in word-initial position, while the ethnic of BGS and the social stratum of MMC tend to use more of the standard variant of [e] in wordmedial position. However, males and the age groups of 45-54 and 55-64, tend to use less of the standard form [e] but more of the non-standard variants especially [i] wordinitial. These social groups would most likely to say [ila], [ilok] and [ikor]. In wordmedial, the age groups of 45-54 and 55-64 ; the ethnic groups of MYL, KDZ and BJU; and the social stratum of LWC use more of the [i] in the less formal stylistic variations such as [$\kappa\alpha\rho\iota\tau\alpha$] and [tinom]. There is strong correlation between stylistic variation and all social variations of gender, age, ethnic membership and social stratification for variable (ϵ) in wordmedial position only. The more formal the speech style, the more [e] variant is used, conversely, the less formal the speech style, the more the [a] and [i] variants are used. The used of the [\leftrightarrow] variant is merely accidental as in some minimal pairs such [$\pi \leftrightarrow \rho \alpha N$] 'war' for [$\pi \epsilon \rho \alpha N$] 'brown' as both words are identical phonemically as /perang/ in both reading speech style of WLS and RPS.