

CHAPTER 9

SOCIAL AND STYLISTIC VARIATIONS OF VARIABLE (η)

9.1 INTRODUCTION

The phoneme /h/ is not a variable in most dialects of Malay. The phoneme /h/ is always realised as glottal fricative [h] whether it is in word-initially, word medially or word finally. This includes the Standard Malay, where the phoneme /h/ has only one allophone, glottal fricative [h] with the phonemic realisations as follows:

$$/h/ : \rightarrow \left\{ \begin{array}{l} [h] \text{ /___ all environments} \end{array} \right.$$

Examples:

<i>hidung</i>	‘nose’	:	[ηιδυN]
<i>hari</i>	‘day’	:	[ηαρι]
<i>hutan</i>	‘jungle’	:	[ηυταν]
<i>paha</i>	‘thigh’	:	[παηα]
<i>bahu</i>	‘shoulder’	:	[βαηυ]
<i>tahun</i>	‘year’	:	[ταηυν]
<i>tujuh</i>	‘seven’	:	[τυφυη]
<i>tanah</i>	‘soil/land’	:	[ταναη]
<i>lidah</i>	‘tongue’	:	[λιδαη]

This study investigates the phoneme /η/ in all three environments: in word-initially as in *hidung*, *hati*, *hutan* and *hari* and word-medially as in *paha*, *bahu* and *tahun* and word-finally as in *tujuh*, *tanah*, *buluh* and *lidah*. In other words, the variable (h) is equivalent to the phoneme /h/. Hence, the discussion of this chapter is focused on the variable (η), which represents the word-initial /η/, word-medial /η/, and word-

final /h/. If references need to be made specified on any one above, the term ‘variable (η) word-initial’, ‘variable (η) word- medial’, or ‘variable (h) word-final’ will be used explicitly.

In SMD, the (η) is a variable in the sense that /h/ is sometimes realised as glottal fricative [h] and other times as glottal stop [ʔ] or sometime as h-deletion [O] in the word medially or word finally. However, word-initial /h/ is variably realised either as glottal fricative [h] or h-deletion [O]. In other words, /h/ is often alternating between [η], [ʔ] and h-deletion [O]. Thus, the variable (η) has three variants, namely open front glottal fricative [h], glottal stop [ʔ] and η-deletion [O] with the following phonemic realisation:

$$(h) = \text{word-initial /h/} \rightarrow \begin{cases} (h)_{-1} = [h] \\ (h)_{-2} = [O] \end{cases}$$

$$(h) = \begin{matrix} \text{word-medial /h/} \\ \text{word-final /h/} \end{matrix} \rightarrow \begin{cases} (h)_{-1} = [h] \\ (h)_{-2} = [ʔ] \\ (h)_{-3} = [O] \end{cases}$$

These symbols representing the first variant of the variable (h) is glottal fricative [h], the second variant of the variable (h) is glottal stop [ʔ], and the third is the η-deletion [O]. The standard variant is the [h] and the [ʔ] αvδ [O] are the non-standard. It is interesting to note that variable (h) is never realised as [ʔ] in word-initial position. The variable (h) is alternating as follows in SMD:

Examples:

<i>hidung</i> ‘nose’	:	[ηιδυN] ~ [ιδυN]
<i>hari</i> ‘day’	:	[ηαρι] ~ [αρι]
<i>hutan</i> ‘jungle’	:	[ηυταν] ~ [υταν]
<i>paha</i> ‘thigh’	:	[παηα] ~ [πα?α] ~ [παα]
<i>bahu</i> ‘shoulder’	:	[βαηυ] ~ [βα?υ] ~ [βαυ]
<i>tahun</i> ‘year’	:	[ταηυν] ~ [τα?υν] ~ [ταυν]
<i>tujuh</i> ‘seven’	:	[τυφυη] ~ [τυφυ?] ~ [τυφυ]
<i>tanah</i> ‘soil/land’	:	[ταναη] ~ [τανα?] ~ [τανα]
<i>lidah</i> ‘tongue’	:	[λιδαη] ~ [λιδα?] ~ [λιδα]

As the variable (h) is very common feature in SMD, thus, there are not many missing cases found in the speeches of the informants involved. In word-initial position, variable (h) is found in the speeches of all the 90 participants who were involved in WLS and RPS. However, there are 15 missing cases in FS and 5 in CS. Thus, this variable is only present in the speech of 93 informants in FS and 103 informants in CS. For word-medial position, variable (h) 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 all the 107 informants involved in FS and all 108 informants in CS. There is only 1 missing case in FS. For word-final position, variable (h) is found in the speech of all the 90 participants who were involved in WLS and RPS and all 108 informants involved in FS and CS. There is no missing case of variable (h) in word-final position.

Based on the means shown in Table 9.1, for word-initial position, the variable (h) is variably realised either as [η] or h-deletion [O] in all stylistic variations. The respective percentage mean of variable (h) realised as [η] and [O] are 92.89 and 7.11% in WLS; 97.96 and 2.04% in RPS; 75.62 and 24.38% in FS; 77.09 and 22.91% in CS. This shows that the word-initial /h/ is realised high as [h] (75.62-97.96%) and low as [O] (2.04-97.96%).

Table 9.1: Descriptive Statistics of Variable (η) Word-Initial

Stylistic Variation	Variant	N	Min	Max	Mean	Std. Deviation
WLS	(η) ₋₁ = [h]	90	20	100	92.89	15.08
	(η) ₋₂ = [O]	90	0	80	7.11	15.08
RPS	(η) ₋₁ = [h]	90	16.67	100	97.96	9.94
	(η) ₋₂ = [O]	90	0	83.33	2.04	9.94
FS	(η) ₋₁ = [h]	93	0	100	75.62	31.68
	(η) ₋₂ = [O]	93	0	100	24.38	31.68
CS	(η) ₋₁ = [h]	103	0	100	77.09	29.90
	(η) ₋₂ = [O]	103	0	100	22.91	29.90

Table 9.2 shows that in word-medial position, variable (η) is variable realised either as [η], [?] or [O], with the respective percentage mean of 97.22, 1.48 and 1.30% in WLS; 92.22, 2.10 and 5.68% in RPS; 60.52, 2.47 and 37.00% in FS; and 49.15, 2.60 and 48.25% in CS. This shows that the word-medial /h/ is also realised high as [h] (49.15-97.22%), medium as [O] (1.30-48.25%) and low as [?] (1.48-2.60%).

Table 9.2: Descriptive Statistics of Variable (η) Word-Medial

Stylistic Variation	Variant	N	Min	Max	Mean	Std. Deviation
WLS	(η) ₋₁ = [h]	90	50	100	97.22	8.00
	(η) ₋₂ = [?]	90	0	16.67	1.48	4.77
	(η) ₋₃ = [O]	90	0	50	1.30	6.24
RPS	(η) ₋₁ = [h]	90	38.89	100	92.22	12.08
	(η) ₋₂ = [?]	90	0	33.33	2.10	5.92
	(η) ₋₃ = [O]	90	0	44.44	5.68	8.22
FS	(η) ₋₁ = [h]	107	0	100	60.52	27.60
	(η) ₋₂ = [?]	107	0	100	2.47	10.79
	(η) ₋₃ = [O]	107	0	100	37.00	26.97
CS	(η) ₋₁ = [h]	108	0	100	49.15	26.29
	(η) ₋₂ = [?]	108	0	60	2.60	7.55
	(η) ₋₃ = [O]	108	0	100	48.25	26.69

As for the word-final position, Table 9.3 shows that the respective percentage mean of variable (η) realised as [η], [?] and [O] are 93.82, 3.51 and 2.67% in WLS; 94.46, 3.16 and 2.37% in RPS; 90.63, 3.86 and 5.50% in FS; 90.44, 4.81 and 4.75% in

CS. This shows that the word-medial /h/ is also realised high as [h] (90.44-94.46%) and equally less amount as [ʔ] (3.16-4.81%), and [O] (2.67-5.50%).

Table 9.3: Descriptive Statistics of Variable (η) Word-Final

Stylistic Variation	Variant	N	Min	Max	Mean	Std. Deviation
WLS	(η) ₋₁ = [h]	90	53.85	100	93.82	9.94
	(η) ₋₂ = [ʔ]	90	0	38.46	3.51	7.03
	(η) ₋₃ = [O]	90	0	30.77	2.67	5.86
RPS	(η) ₋₁ = [h]	90	53.85	100	94.46	7.91
	(η) ₋₂ = [ʔ]	90	0	46.15	3.16	6.32
	(η) ₋₃ = [O]	90	0	32.14	2.37	4.27
FS	(η) ₋₁ = [h]	108	43.75	100	90.63	11.39
	(η) ₋₂ = [ʔ]	108	0	25	3.86	5.53
	(η) ₋₃ = [O]	108	0	54.55	5.50	9.67
CS	(η) ₋₁ = [h]	108	0	100	90.44	12.44
	(η) ₋₂ = [ʔ]	108	0	100	4.81	10.66
	(η) ₋₃ = [O]	108	0	29.23	4.75	6.49

9.2 VARIABLE (η) AND GENDER

(a) WORD-INITIAL /η/

This study shows that in word-initial position, variable (h) is realised the most as [η], the medium as h-deletion [O], by both gender groups in all stylistic variations. All gender groups use [h] between 70.56 and 98.33%, followed by [O] between 1.67 and 29.44% in different stylistic variations.

Table 9.4: Percentage Means of Variable (η) Word-Initial by Gender and Stylistic Variation

Stylistic Variation	Variants	Male	Female
WLS	(η) ₋₁ = [h]	91.00	94.40
	(η) ₋₂ = [O]	9.00	5.60
RPS	(η) ₋₁ = [h]	97.50	98.33
	(η) ₋₂ = [O]	2.50	1.67

FS	(η) ₋₁ = [h]	82.64	70.56
	(η) ₋₂ = [O]	17.36	29.44
CS	(η) ₋₁ = [h]	77.87	76.49
	(η) ₋₂ = [O]	22.13	23.51

Between the two genders, males use a higher percentage of [η] in FS and CS and they delete more variable (η) in WLS. Females use a higher percentage of [η] in WLS and RPS. Females delete variable (η) more than males in FS and CS.

The indices for variable (h) by gender and stylistic variation lie between the scores of 102.50 and 129.44 as shown in Figure 9.1. These index scores incline towards the use of (h)₋₁, which is the [η] variant in word-initial position.

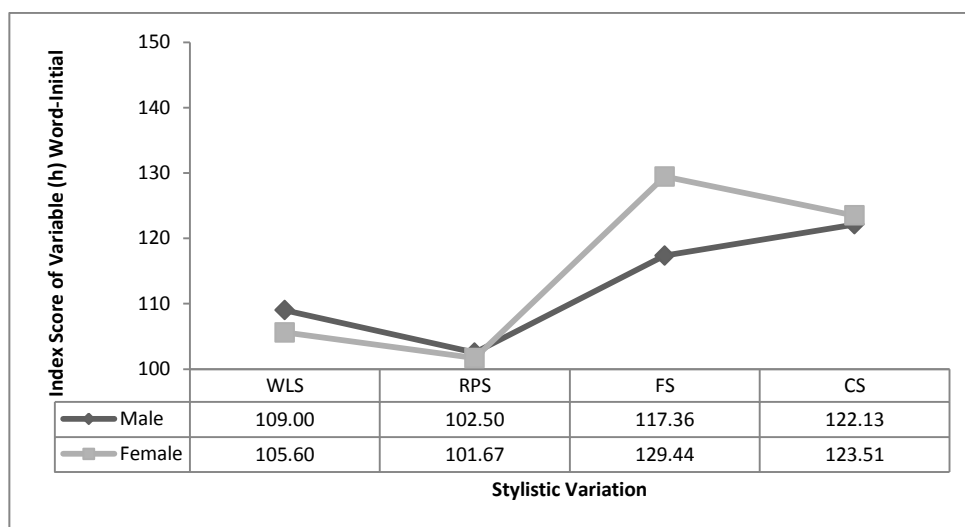


Figure 9.1: Index Score of Variable (η) Word-Initial by Stylistic Variation and Gender

The variable (η) is not subject to gender differentiation, as shown by the narrow space separating the lines for males and females. The space between these gender lines is not widespread. This is supported by the percentage difference of the variable (η) realised as [h] and [O] which is too small and insignificant at 5% level ($p > 0.05$) as testified by the Independent-Samples T-Test (Appendix Gi).

Although there are significant percentage differences of the variable (η) realised as [h] and [O] at 5% level ($p>0.05$) by both genders from one stylistic variation to another especially between WLS-RPS, and RPS-FS as tested by the Paired-Samples T-Test, the variable (η) is not subject to stylistic differentiation (Appendix Gii). The gender lines inconsistently rise or drop in the less formal style. This is evidence between WLS-RPS, where the less formal the stylistic variation, the more the use of [h]. While between RPS-FS, the less formal the stylistic variation, the less the [h] is used.

As the variable (h) does not correlated with gender variation or stylistic variation, it is also 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 (h) in word-initial position in SMD.

(b) WORD-MEDIAL / η /

This study shows that in word-medial position, variable (h) is variably realised the most as [η] , medium as h-deletion [O] and the least as [?] by both gender groups in all stylistic variations. All gender groups use [h] at a minimum of 45.70% and a maximum of 98.67%, followed by [O] at a minimum of 0.33% and a maximum of 51.84%, and [?] at a minimum of 1% and a maximum of 4.11% in different stylistic variations.

Table 9.5: Percentage Means of Variable (η) Word-Medial by Gender and Stylistic Variation

Stylistic Variation	Variants	Male	Female
WLS	(η)- ₁ = [h]	95.42	98.67

	(η)- ₂ = [ʔ]	2.08	1.00
	(η)- ₃ = [O]	2.50	0.33
RPS	(η)- ₁ = [h]	88.89	94.89
	(η)- ₂ = [ʔ]	2.92	1.44
	(η)- ₃ = [O]	8.19	3.67
FS	(η)- ₁ = [h]	59.79	61.09
	(η)- ₂ = [ʔ]	4.11	1.19
	(η)- ₃ = [O]	36.09	37.72
CS	(η)- ₁ = [h]	53.62	45.70
	(η)- ₂ = [ʔ]	2.77	2.46
	(η)- ₃ = [O]	43.60	51.84

Between the two genders, males use a higher percentage of [η] in CS and a higher percentage of [ʔ] in all four stylistic variations. Males delete variable (η) more than females in WLS and RPS. Females use a higher percentage of [η] in WLS, RPS and FS, and a lower percentage of [ʔ] in all four stylistic variations. Females delete variable (η) more than males in FS and CS.

The indices for variable (h) by gender and stylistic variation lie between the scores of 101.67 and 206.14 as shown in Figure 9.2. These index scores correspond to the use between (h)-₁ and (h)-₂, which are the [η] and [ʔ] variants in word-medial position.

The variable (η) is subject to gender differentiation, as shown by two distinguish gender lines especially in RPS. This is supported by the significant percentage differences at 5% level ($p < 0.05$) of variable (h) realised as [h], [ʔ] and [O] between one gender from another in different stylistic variation especially in RPS as testified by the Independent-Samples T-Test (Appendix Giii).

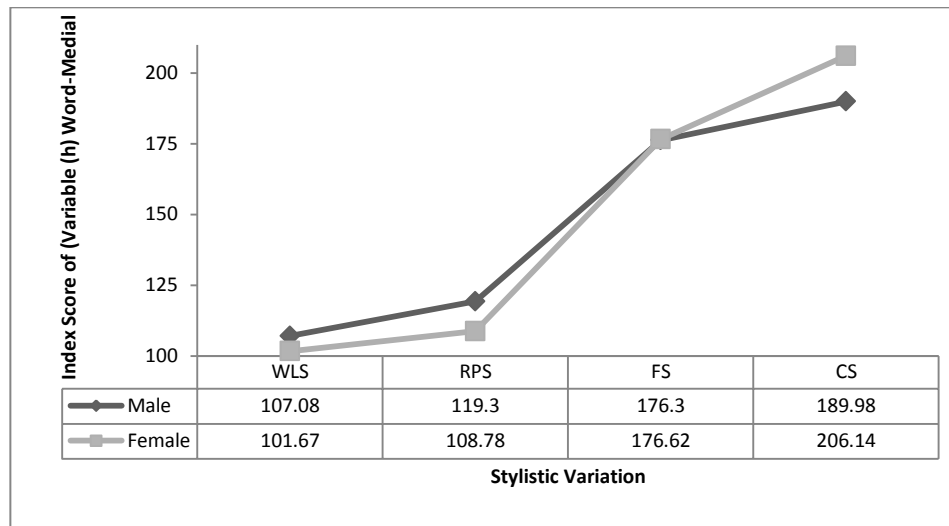


Figure 9.2: Index Score of Variable (η) Word-Medial by Gender and Stylistic Variation

Similarly, these index scores show that the variable (η) is subject to the stylistic differentiation, as the gender lines consistently rise in the less formal style. This is also supported by the significant percentage differences at 5% level ($p < 0.05$) of variable (h) realised as [h], [ʔ] and [O] by gender from one stylistic variation to another especially WLS-RPS, and RPS- FS tested by the Paired-Samples T-Test (Appendix Giv).

As the variable (h) in word-medial position is correlated with gender and stylistic variations, it is a marker in the speech community of SMD. It has some consequential role in the marking of gender differences.

(c) **WORD-FINAL / η /**

This study shows that in word-initial position, variable (h) is realised more as [h], and equally less as [ʔ] and h-deletion [O] by both genders in all stylistic variations. All gender groups use at least 89.74% and at most 95.31% of [h], followed by at least 2.31% and at most 5.76% of [O], and at least 2.38% and at most 5.70% of [ʔ], in different stylistic variations.

Table 9.6: Percentage Means of Variable (η) Word-Final

by Gender and Stylistic Variation

Stylistic Variation	Variants	Male	Female
WLS	(η) ₋₁ = [h]	93.46	94.10
	(η) ₋₂ = [?]	4.23	2.94
	(η) ₋₃ = [O]	2.31	2.96
RPS	(η) ₋₁ = [h]	95.31	93.78
	(η) ₋₂ = [?]	2.30	3.85
	(η) ₋₃ = [O]	2.38	2.36
FS	(η) ₋₁ = [h]	91.80	89.74
	(η) ₋₂ = [?]	3.03	4.50
	(η) ₋₃ = [O]	5.17	5.76
CS	(η) ₋₁ = [h]	90.10	90.70
	(η) ₋₂ = [?]	5.70	4.12
	(η) ₋₃ = [O]	4.20	5.18

Between the two genders, males use a higher percentage of [η] variant in RPS and FS, and higher percentage of [?] in WLS and CS. Males use h-deletion more than females in RPS. Females use a higher percentage of [η] variant in WLS and CS, and a higher percentage of [?] in RPS and FS. Females use h-deletion more than females in all the stylistic variation except in RPS.

The indices for variable (h) by gender and stylistic variation lie between the scores of 107.07 and 116.02 as shown in Figure 9.3. These index scores are almost consistence to the use of (h)₋₁, which is the [η] variant in word-final position.

The variable (η) is not subject to gender differentiation, as shown by the close male and female lines and the narrow space separating these lines. This is supported by the insignificant percentage differences at 5% level ($p > 0.05$) of variable (h) realised as [h], [?] and [O] between one gender from another in different stylistic variation as testified by the Independent-Samples T-Test (Appendix Gv).

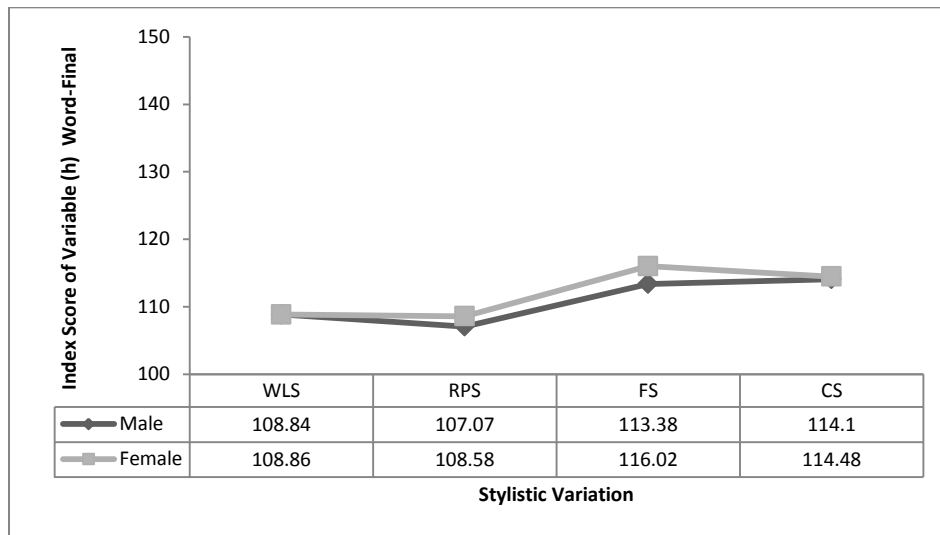


Figure 9.3: Index Score of Variable (η) Word-Final by Gender and Stylistic Variation

Although there is significant percentage differences at 5% level ($p>0.05$) of variable (h) realised as [h], [ʔ] and [O] by gender from one stylistic variation to another except for males in RPS- FS as tested by the Paired-Samples T-Test, the index scores show that the variable (η) is not subject to the stylistic differentiation, as the gender lines are inconsistently rise in the less formal style (Appendix Gvi).

In sum, the variable (h) in word-final position does not correlated with gender variation or stylistic variation. It is also neither a marker nor an indicator in the speech community of SMD. 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 (h) in word-final position in SMD.

9.3 VARIABLE (η) AND AGE

(a) WORD-INITIAL /h/

This study shows that in word-initial position, variable (h) is realised more as [h], less as h-deletion [O], by all age groups in all stylistic variations. All age groups use [h]

between 47.15 and 99.54%, and followed by [O] between 0.46 and 52.85% in different stylistic variations.

Table 9.7: Percentage Means of Variable (η) Word-Initial by Age and Stylistic Variation

Stylistic Variation	Variant	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs
WLS	(η) ₋₁ = [h]	96.67	90.00	92.73	80.00	.
	(η) ₋₂ = [O]	3.33	10.00	7.27	20.00	.
RPS	(η) ₋₁ = [h]	99.54	98.21	98.48	79.17	.
	(η) ₋₂ = [O]	0.46	1.79	1.52	20.83	.
FS	(η) ₋₁ = [h]	77.55	80.93	78.72	70.63	56.97
	(η) ₋₂ = [O]	22.45	19.07	21.28	29.37	43.03
CS	(η) ₋₁ = [h]	82.65	87.10	78.88	66.73	47.15
	(η) ₋₂ = [O]	17.35	12.90	21.12	33.27	52.85

Among all the age groups, this youngest age group of 15 - 24 year olds uses the lowest percentage of h-deletion [O] and the highest percentage of [h] in WLS and RPS. While the 25-34 year olds age group did the same in FS and CS. The age group of 45 - 54 year olds uses the lowest percentage of [η] and the highest percentage of [O] in WLS and RPS. This oldest age group of 55-64 year olds uses the least of [η] among all in FS and CS and they delete the variable (η) the most in all stylistic variation.

The indices for variable (h) by age and stylistic variation lie between the scores of 100.93 to 152.82 (see Figure 9.43). These index scores of variable (h) in word-medial position are leaning towards the use of (h)₋₁ which is the [η] for the younger age groups, however, the older age group moving away from [h] towards the use of (h)₋₂ which is the [O].

The graph shows that the variable (η) has little correlation with age especially for the two older age groups. This is supported by the significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as [η] and [O] word-finally

between the age group of 45-54 year olds from the younger age groups in RPS ; and between the oldest age group of 55-64 year olds from the younger age groups in CS as tested by One-Way ANOVA (Appendix Gvii).

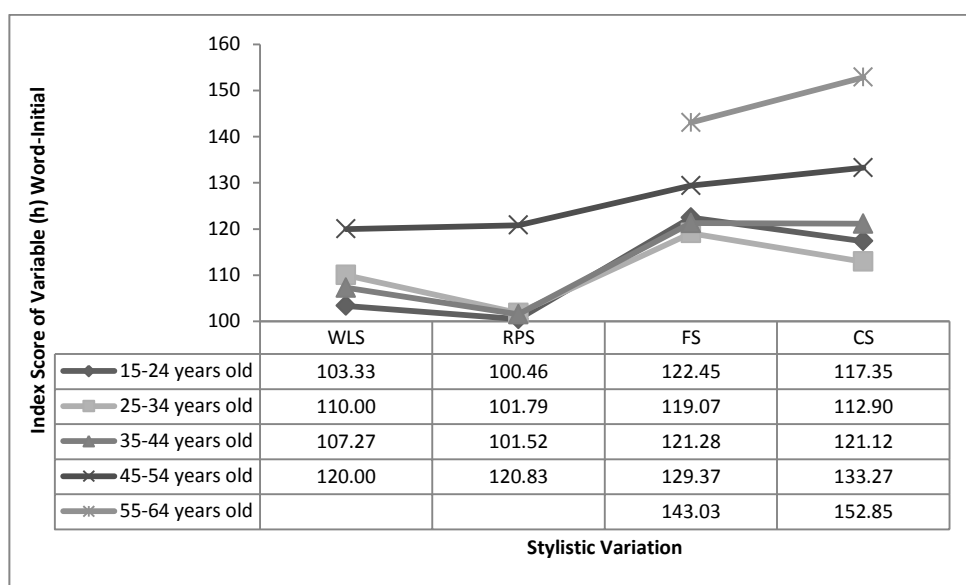


Figure 9.4: Index Score of Variable (η) Word-Initial by Stylistic Variation and Age

The index graph shows that the older age group lines rise in the less formal style. Furthermore, most of the percentage differences of variable (η) realised as [ŋ] and [O] word-initial between one stylistic variation and another are significant at 5% level ($p > 0.05$) particularly between WLS-RPS for the age group of 25-34 year olds; between RPS-FS for the age group of 15-24 year olds, 25-34 year olds and 35-44 year olds as tested by the Paired-Samples T-Test (Appendix Giii).

As the variable (h) is correlated with age and stylistic variations, therefore, variable (h) is a marker in the speech community of SMD as it has some consequential role in the marking of age differences especially the two older age groups of 45-54 and 55-64 year olds from the younger ones.

(b) WORD-MEDIAL /h/

This study shows that in word-medial position, variable (h) is realised the most as the [ŋ] variant, and less as the h-deletion [O] variant in all stylistic variations except for the oldest age group of 55-64 and the age group of 45-54 where they use more of h-deletion, and less as the [h] variant in some stylistic variations, especially in FS and CS. All age groups use [h] at a minimum of 28.67% and a maximum of 97.73%, followed by [O] at a minimum of zero % and a maximum of 70.94%, and [?] at a minimum of zero % and a maximum of 4.48% in different stylistic variations.

Among all the age groups, the age group of 25-34 year olds uses the highest percentage of [?] in RPS and CS. The age group of 35-44 year olds uses the highest percentage of [?] WLS. The age group of 45-54 year olds uses the lowest percentage of [h] in WLS and RPS, thus they use the highest percentage of [?] in WLS, RPS and FS. It is interesting to note that this age group also deletes variable (h) the most in RPS. The oldest age group of 55-64 year olds uses the lowest percentage of [h], thus they deletes variable (h) the most in FS and CS.

Table 9.8: Percentage Means of Variable (ŋ) Word-Medial by Age and Stylistic Variation

Stylistic Variation	Variant	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs
WLS	(ŋ) ₋₁ = [h]	97.22	97.02	97.73	95.83	.
	(ŋ) ₋₂ = [?]	1.39	2.38	0.00	4.17	.
	(ŋ) ₋₃ = [O]	1.39	0.60	2.27	0.00	.
RPS	(ŋ) ₋₁ = [h]	94.79	89.64	93.43	80.56	.
	(ŋ) ₋₂ = [?]	0.46	4.17	1.77	4.17	.
	(ŋ) ₋₃ = [O]	4.75	6.20	4.80	15.28	.
FS	(ŋ) ₋₁ = [h]	66.21	72.15	58.74	50.81	30.42
	(ŋ) ₋₂ = [?]	3.79	1.93	1.30	4.30	1.67
	(ŋ) ₋₃ = [O]	30.01	25.92	39.97	44.89	67.92
CS	(ŋ) ₋₁ = [h]	49.79	51.83	57.33	37.07	28.67
	(ŋ) ₋₂ = [?]	2.16	4.48	2.72	1.50	0.40
	(ŋ) ₋₃ = [O]	48.05	43.69	39.96	61.44	70.94

The indices for variable (h) by age and stylistic variation lie between the scores of 103.57 to 242.27 (see Figure 9.5). These index scores of variable (h) in word-medial position correspond to the use between (h)₋₁ and (η)₋₂, which are the [η] ανδ [ʔ] variants for the younger age groups and between (h)₋₁ and (η)₋₃, which are the [η] ανδ [O] variants for the older age groups.

The graph shows that the variable (η) has little correlation with age groups although some age lines entangle with others especially in WLS and RPS. Conversely, lines in FS and CS are more spread out. This is supported by the significant percentage differences at 5% level ($p > 0.05$) of variable (η) realised as [η] and [O] word-finally between one age group and another in FS and CS as tested by One-Way ANOVA Test (Appendix Gix).

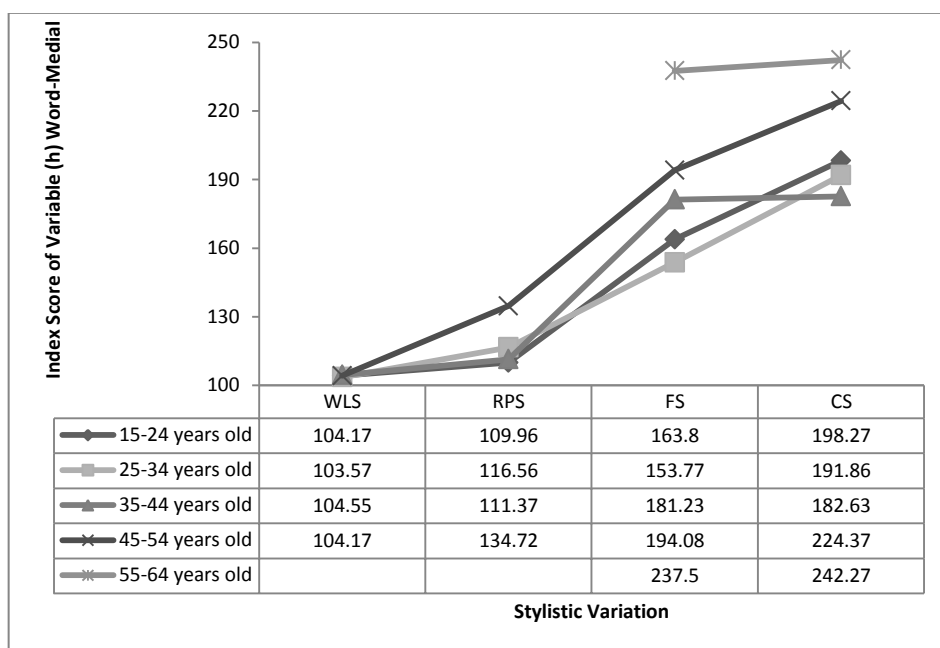


Figure 9.5: Index Score of Variable (η) Word-Medial by Age and Stylistic Variation

The index graph also shows that all the age lines rise in the less formal style. This is proven by the significant percentage differences at 5% level ($p > 0.05$) of variable (η) realised as [η], [ʔ] and [O] word-medially between one stylistic variation

and another particularly between WLS-RPS for the age group of 15-24 year olds, and 35-44 year olds; between RPS-FS for the age group of 15-24 year olds, 25-34 year olds and 35-44 year olds; and between FS-CS for the age group of 15-24 year olds, and 25-34 year olds as tested by the Paired-Samples T-Test (Appendix Gx).

As the variable (h) is correlated with age variation and stylistic variation, therefore, variable (h) is a marker in the speech community of SMD. It has some consequential role in the marking of age differences especially the older age groups from the younger ones.

(c) WORD-FINAL /h/

This study shows that in word-final position, variable (h) is realised the most as [η] , and equally less as [ʔ] and [O] depending on the stylistic variation. All age groups use at least 83.18% and at most 97.16% of [h], followed by at least 1.46% and at most 10.94% of [O], and at least 1.25% and at most 6.98% of [ʔ], in different stylistic variations.

Table 9.9: Percentage Means of Variable (η) Word-Final by Age and Stylistic Variation

Stylistic Variation	Variant	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs
WLS	(η) ₋₁ = [h]	95.30	93.68	91.14	96.16	.
	(η) ₋₂ = [ʔ]	2.56	3.85	4.92	1.92	.
	(η) ₋₃ = [O]	2.14	2.47	3.93	1.92	.
RPS	(η) ₋₁ = [h]	97.16	92.75	92.71	91.87	.
	(η) ₋₂ = [ʔ]	1.25	3.48	5.83	3.60	.
	(η) ₋₃ = [O]	1.60	3.77	1.46	4.53	.
FS	(η) ₋₁ = [h]	91.85	91.79	90.35	91.05	85.13
	(η) ₋₂ = [ʔ]	3.25	4.02	4.19	3.46	4.66
	(η) ₋₃ = [O]	4.90	4.19	5.46	5.49	10.21
CS	(η) ₋₁ = [h]	90.34	93.40	91.32	88.79	83.18
	(η) ₋₂ = [ʔ]	6.98	3.11	3.85	4.03	5.88
	(η) ₋₃ = [O]	2.68	3.50	4.82	7.18	10.94

Among all the age groups, the youngest age group of 15-24 years uses the highest percentage of [ʔ] and the lowest percentage of [O] in CS. The age group of 35-44 year olds uses the highest percentage of [O] and [ʔ], and the lowest percentage of [ŋ] in WLS. They also use the highest percentage of [ʔ] in RPS. The 45-54 year olds uses the highest percentage of [O] and the lowest percentage of [ŋ] in RPS. The age group of 55-64 year olds uses the least of [h] but drops of variable (ŋ) the most in FS and CS. This group also uses the most of [ʔ] among all the age groups in FS.

The indices for variable (h) by age and stylistic variation lie between the scores of 104.44 to 127.76 (see Figure 9.6). These index scores of variable (h) in word-final position are almost consistent with to the use between (h)₋₁, which is the [h] variant for age groups.

The graph shows that the variable (ŋ) has little correlation with age. Although most age lines entangle with others and there is no clear space separating the groups, except for the oldest age group, is very distinctive from others. This is supported by the significant percentage differences at 5% level ($p < 0.05$) of variable (ŋ) realised as [O] word-finally between one age group and another in the stylistic variations CS as tested by One-Way ANOVA Test (Appendix Gxi).

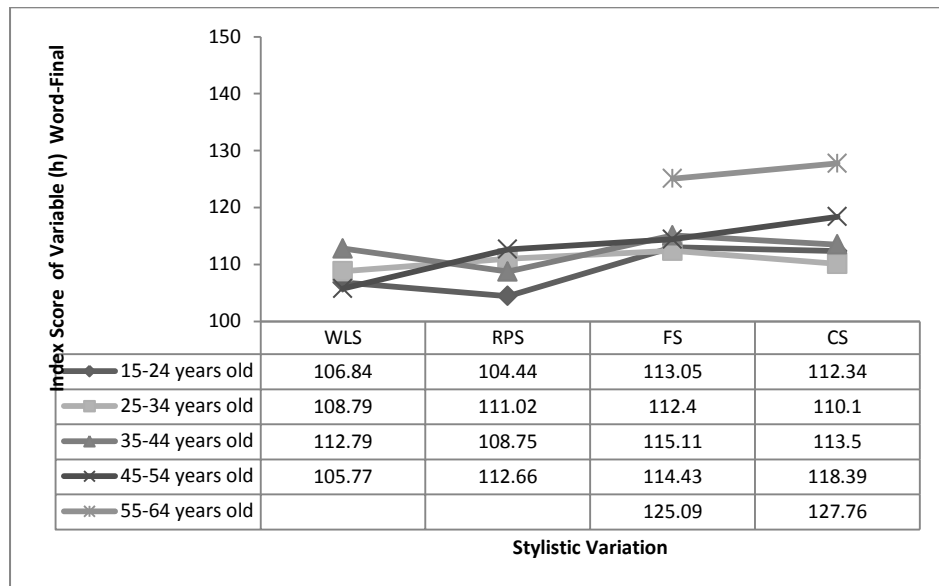


Figure 9.6: Index Score of Variable (η) Word-Final by Age and Stylistic Variation

The index graph also shows that all the age lines generally rise in the less formal style. This is proven by the significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as $[\eta]$ and $[?]$ word-medially between RPS-FS for the age group of 15-24 year olds; and as $[O]$ for the 35-44 year olds tested by the Paired-Samples T-Test (Appendix Gxii).

As the variable (h) is correlated with age variation and stylistic variation, therefore, variable (h) is a marker in the speech community of SMD. It has some consequential role in the marking of age differences especially the older age groups from the younger ones in word-final position.

9.4 VARIABLE (η) AND ETHNIC MEMBERSHIP

(a) WORD-INITIAL /h/

This study shows that in word-initial position, variable (h) is realised more as $[\eta]$ and less as h-deletion $[O]$ by all ethnic groups in all stylistic variations. All ethnic groups use $[h]$ between 64.73 and 100%, and followed by $[O]$ between zero and 35.27% in different stylistic variations.

Table 9.10: Percentage Means of Variable (η) Word-Initial by Ethnic Membership and Stylistic Variation

Stylistic Variation	Variant	MLY	KDZ	BJU	BGS	BMP	CHI	ONB
WLS	(η) ₋₁ = [h]	94.44	90.97	92.00	97.50	93.33	94.29	.
	(η) ₋₂ = [O]	5.56	9.03	8.00	2.50	6.67	5.71	.
RPS	(η) ₋₁ = [h]	95.37	99.46	96.67	97.92	100.00	100.00	.
	(η) ₋₂ = [O]	4.63	0.54	3.33	2.08	0.00	0.00	.
FS	(η) ₋₁ = [h]	82.47	77.25	64.73	79.63	76.00	86.25	73.97
	(η) ₋₂ = [O]	17.53	22.75	35.27	20.37	24.00	13.75	26.03
CS	(η) ₋₁ = [h]	85.49	66.69	75.90	87.63	76.67	93.33	78.30
	(η) ₋₂ = [O]	14.51	33.31	24.10	12.37	23.33	6.67	21.70

Among all the ethnic membership, MLY uses the least percentage of [h] and thus they use the most percentage of [O] in RPS. KDZ uses the lowest percentage of [η] but the highest percentage of [O] in WLS and CS. BJU uses the highest percentage of [O] and the lowest percentage of [h] among all the ethnic groups in FS.

The indices of variable (η) by ethnic membership and stylistic variation lie between the scores of 100 and 135.27 as shown in Figure 9.7. These index scores of variable (h) in word-initial position are almost consistent with to the use of (h)₋₁, which is the [h] variant for all ethnic groups in WLS and RPS, and incline towards (η)₋₂, which is the [O] variant in FS and CS.

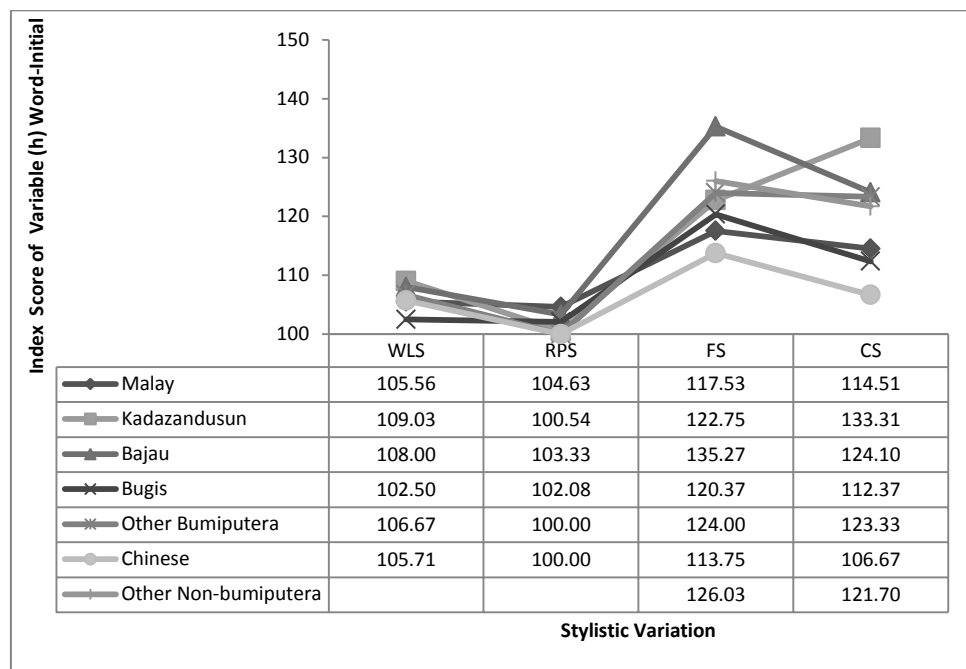


Figure 9.7: Index Score of Variable (η) Word-Initial by Ethnic Membership and Stylistic Variation

The variable (η) is not subject to ethnic differentiation, as most lines are overlapping and spaces separating these lines are narrow. This is supported by the insignificant percentage differences at 5% level ($p > 0.05$) of variable (η) realised as [h] and [O] word-initially between one ethnic group and another in all stylistic variation as tested by One-Way ANOVA Test (Appendix Gxiii).

However, the index graph illustrates variable (h) is subject to stylistic differentiation as the lines generally rise in the less formal style. This is also proven by the significant percentage differences at 5% level ($p > 0.05$) of variable (η) realised as [η] and [O] word-initially except for between WLS-RPS, and RPS-FS for KDZ; and between RPS-FS and FS-CS for BJU as tested by the Paired-Samples T-Test (Appendix Gxiv).

As the variable (η) does not correlated with ethnic group variation but stylistic variation, it is neither a marker nor an indicator in the speech community of SMD as it

no consequential role in the marking of ethnic differences. There is no significant difference between the speech of different ethnics with regard to the use of variable (h) in word-initial position in SMD.

(b) WORD-MEDIAL /h/

In word-medial position, most ethnic groups use the highest percentage of [ŋ], a medium percentage of h-deletion [O] and the least percentage of [ʔ] in all stylistic variations, except for KDZ, BJU and ONB who use h-deletion more than [h] and [ʔ] in some stylistic variations. All ethnic groups use [h] at a minimum of 42.66% and a maximum of 100%, followed by [O] at a minimum of zero% and a maximum of 51.04%, and [ʔ] at a minimum of zero% and a maximum of 8.68% in different stylistic variations.

Table 9.11: Percentage Means of Variable (ŋ) Word-Medial by Ethnic Membership and Stylistic Variation

Stylistic Variation	Variant	MLY	KDZ	BJU	BGS	BMP	CHI	ONB
WLS	(ŋ) ₋₁ = [h]	94.44	98.39	96.67	97.92	97.22	100.00	.
	(ŋ) ₋₂ = [ʔ]	1.85	1.08	2.50	0.00	2.78	0.00	.
	(ŋ) ₋₃ = [O]	3.70	0.54	0.83	2.08	0.00	0.00	.

Table 9.11, cont.

Stylistic Variation	Variant	MLY	KDZ	BJU	BGS	BMP	CHI	ONB
RPS	(ŋ) ₋₁ = [h]	91.05	92.29	91.88	91.59	93.85	95.24	.
	(ŋ) ₋₂ = [ʔ]	1.85	1.97	3.06	0.70	2.78	1.59	.
	(ŋ) ₋₃ = [O]	7.10	5.74	5.07	7.72	3.37	3.18	.
FS	(ŋ) ₋₁ = [h]	63.69	59.21	66.26	74.24	65.68	54.59	42.66
	(ŋ) ₋₂ = [ʔ]	1.09	2.42	1.28	1.46	0.32	1.23	8.68
	(ŋ) ₋₃ = [O]	35.22	38.37	32.46	24.31	34.01	44.18	48.66
CS	(ŋ) ₋₁ = [h]	54.80	42.68	45.67	63.47	52.75	52.13	50.41
	(ŋ) ₋₂ = [ʔ]	3.58	2.95	3.29	0.63	2.32	1.25	2.01
	(ŋ) ₋₃ = [O]	41.62	54.37	51.04	35.90	44.93	46.62	47.58

Among all ethnic groups, MLY uses the most percentage of [O] in WLS, and [ʔ] in CS. KDZ uses the lowest percentage of [ŋ] but the highest percentage of [O] in CS. BJU uses the highest percentage of [ʔ] in RPS. BGS uses the highest percentage of [O] the most in RPS. BMP uses the highest percentage of [ʔ] in WLS. ONB uses the most percentage of [ʔ] and [O] among all the ethnic groups in FS.

The indices of variable (ŋ) by ethnic membership and stylistic variation lie between the scores of 100 and 211.69 as shown in Figure 9.8. These index scores of variable (h) in word-medial position are almost consistent with to the use of (h)₋₁, which is the [h] variant for all ethnic groups in WLS and RPS, and incline towards (ŋ)₋₂, which is the [ʔ] variants.

Figure 9.8 shows that the variable (ŋ) is not subject to ethnic group differentiation, as lines are overlapping and spaces separating these lines are narrow. This is in line with the insignificant percentage differences at 5% level ($p > 0.05$) of variable (ŋ) realised as [ŋ], [ʔ] and [O] word-medially between one ethnic group and another in all stylistic variations as tested by One-Way ANOVA Test (Appendix Gxv).

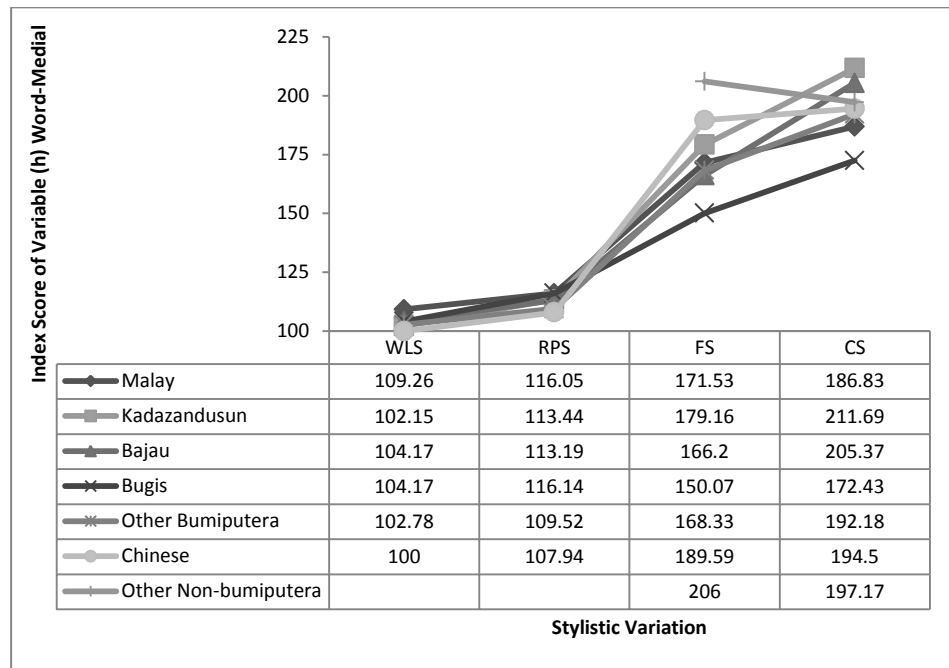


Figure 9.8: Index Score of Variable (η) Word-Medial by Ethnic Membership and Stylistic Variation

On the other hand, the index graph illustrates variable (h) is subject to stylistic differentiation, as the lines generally rise in the less formal style except for the ONB. This is also proven by the significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as [ŋ] and [O] word-medially by most ethnic membership between one stylistic variation and another, particularly between WLS-RPS for KDZ; between RPS-FS for KDZ and BJU; and between FS-CS in BJU as tested by the Paired-Samples T-Test (Appendix Gxvi).

As the variable (η) in word-medial position does not correlated with ethnic group variation but stylistic variation. Thus, it is neither a marker nor an indicator in the speech community of SMD as it has no consequential role in the marking of ethnic differences. There is no significant difference between the speeches of different ethnic groups with regard to the use of variable (h) in word-medial position in SMD.

(c) **WORD-FINAL /h/**

In word-final position, all ethnic groups use the most of [η], and equally much of [ʔ] and [O] in all stylistic variations. All ethnic groups use at least 80% and at most 98.22% of [h], followed by at least zero and at most 14.48% of [O], and at least 0.19% and at most 10.38% of [ʔ], in different stylistic variations.

Among all the ethnic groups, MLY uses the least percentage of [h] and thus they use the most percentage of [ʔ] in CS. KDZ uses the highest percentage of [ʔ] in RPS. BJU uses the lowest percentage of [η] and the highest percentage of [ʔ] among all the ethnic groups in RPS. BGS uses the highest percentage of [ʔ] in WLS. CHN uses the least of [η] among all the ethnic groups and the most of [O] in WLS and FS. They also use the most of [ʔ] in FS.

Table 9.12: Percentage Means of Variable (η) Word-Final by Ethnic Membership and Stylistic Variation

Stylistic Variation	Variant	MLY	KDZ	BJU	BGS	BMP	CHI	ONB
WLS	(η) ₋₁ = [h]	97.44	90.49	97.69	91.35	97.44	87.92	.
	(η) ₋₂ = [ʔ]	0.43	5.23	1.15	8.65	1.28	6.59	.
	(η) ₋₃ = [O]	2.14	4.28	1.15	0.00	1.28	5.49	.
RPS	(η) ₋₁ = [h]	95.49	94.11	92.22	96.88	98.22	93.82	.
	(η) ₋₂ = [ʔ]	1.79	4.28	4.21	1.34	0.60	3.08	.
	(η) ₋₃ = [O]	2.72	1.61	3.57	1.79	1.19	3.10	.
FS	(η) ₋₁ = [h]	93.08	90.91	92.41	93.41	96.31	80.00	86.83
	(η) ₋₂ = [ʔ]	2.82	4.66	3.66	3.33	0.98	5.52	3.91
	(η) ₋₃ = [O]	4.10	4.43	3.94	3.27	2.71	14.48	9.26
CS	(η) ₋₁ = [h]	86.20	86.49	93.18	95.82	96.77	94.49	91.38
	(η) ₋₂ = [ʔ]	10.38	5.91	2.17	3.02	0.19	2.22	5.04
	(η) ₋₃ = [O]	3.42	7.60	4.65	1.16	3.04	3.29	3.58

The indices of variable (η) by ethnic membership and stylistic variation lie between the scores of 102.98 and 134.48 as shown in Figure 9.9. These index scores of

variable (h) in word-final position are almost consistent with to the use of (h)₋₁, which is the [h] variant for all ethnic groups.

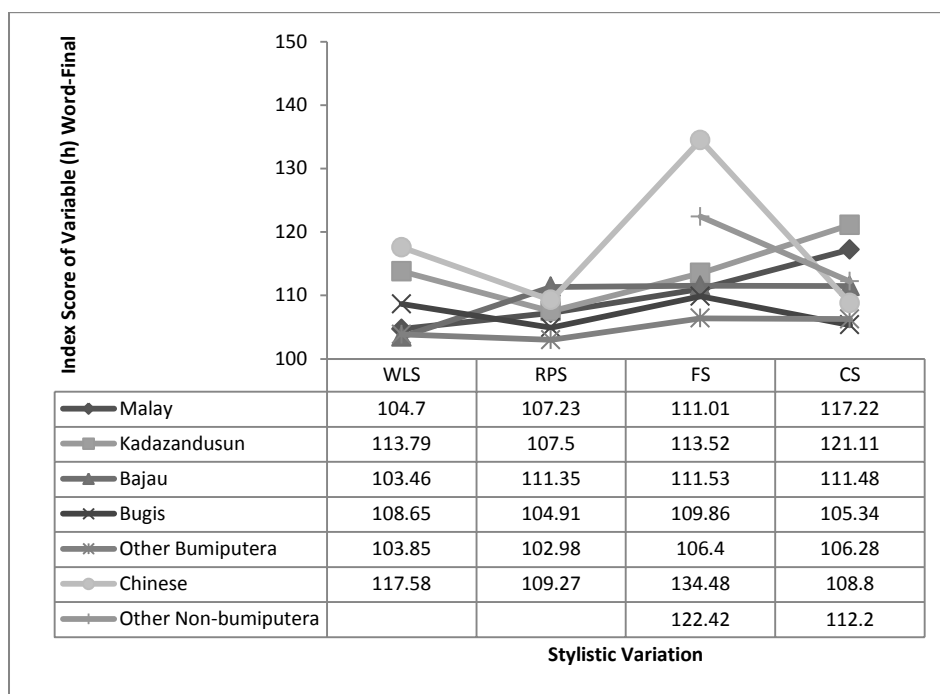


Figure 9.9: Index Score of Variable (η) Word-Final by Ethnic Membership and Stylistic Variation

The variable (η) is correlated a little with ethnic membership lines, although most ethnic lines are overlapping and spaces separating these lines are narrow. However, there is significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as [η] and [$?$] word-finally between one ethnic group and another in different stylistic variation especially for CHN and MLY in WLS and CHN in FS as tested by One-Way ANOVA Test (Appendix Gxvii).

The index graph also illustrates variable (h) is subject to stylistic differentiation. This is also proven by the significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as [η], [$?$] and [O] word-finally by most ethnic membership between one stylistic variation and another particularly between WLS-

RPS for MLY, KDZ and BJU; between FS-CS in KDZ and BGS as tested by the Paired-Samples T-Test (Appendix Gxviii).

As the variable (η) is correlated with ethnic group variation and stylistic variation. Thus, it is a marker in the speech community of SMD as it some consequential role in the marking of ethnic differences, especially the CHN and MLY from the other ethnic groups.

9.5 VARIABLE (η) AND SOCIAL STRATIFICATION

(a) WORD-INITIAL /h/

This study shows that in word-initial position, variable (h) is realised more as [η] , less as h-deletion [O] by all social strata in all stylistic variations. All social strata use [h] between 51.55 and 100%, and followed by [O] between zero and 48.45% in different stylistic variations.

Among all the social strata, the lowest social group of LWC uses the least of [h] in RPS, FS and CS. They also use the most of [O] in FS and CS. MWC uses the highest percentage [O] in WLS. MMC uses the least of [η] but the most [O] among all the social strata in RPS.

Table 9.13: Percentage Means of Variable (η) Word-Initial by Social Stratification and Stylistic Variation

Stylistic Variation	Variant	LWC	MWC	UWC	LMC	MMC
WLS	(η) ₋₁ = [h]	86.67	87.69	97.39	96.36	92.31
	(η) ₋₂ = [O]	13.33	12.31	2.61	3.64	7.69
RPS	(η) ₋₁ = [h]	97.22	98.08	99.28	100.00	92.31
	(η) ₋₂ = [O]	2.78	1.92	0.72	0.00	7.69

Table 9.13, cont.

Stylistic Variation	Variant	LWC	MWC	UWC	LMC	MMC
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FS	(η) ₋₁ = [h]	51.55	74.20	77.16	93.90	88.30
	(η) ₋₂ = [O]	48.45	25.80	22.84	6.10	11.70
CS	(η) ₋₁ = [h]	53.55	76.92	78.16	94.16	90.94
	(η) ₋₂ = [O]	46.45	23.08	21.84	5.84	9.06

The indices for variable (η) by social stratification and stylistic variation lie between the scores of 100 to 148.45 as shown in Figure 9.10. These index scores of variable (h) in word-initial position are almost consistent with the use of (h)₋₁, which is the [ŋ] variant for WLS and RPS; and moving away to (h)₋₂, which is the [O] for FS and CS.

The variable (η) has little correlation with social stratification as this can also be seen in the clear space separating these classes especially in the less formal style. This is supported by percentage differences of variable (η) realised as [ŋ] and [O] word-initially between one social stratification and another which are significant at 5% level ($p < 0.05$) in FS and CS as tested by One-Way ANOVA Test (Appendix Gxix).

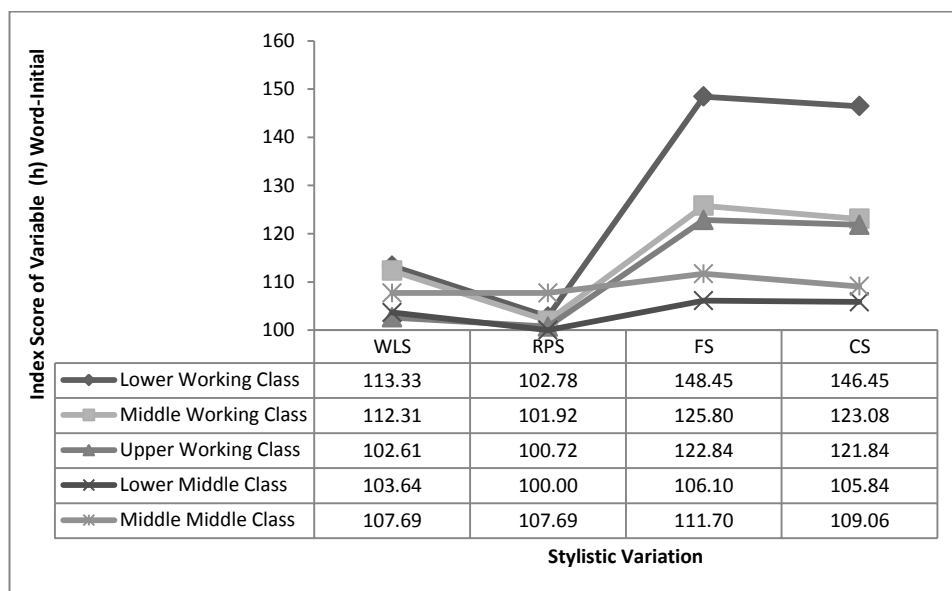


Figure 9.10: Index Score of Variable (η) Word-Initial by Stylistic Variation and Social Stratification

The index graph also illustrates that variable (h) is subject to stylistic differentiation, as most the lines consistently rise in the less formal style. This is also

supported by the most of the significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as [h] and [O] by social stratifications, from one stylistic variation to another particularly between WLS-RPS for MWC; between FS-CS for MWC and UWC as tested by the Paired-Samples T-Test (Appendix Gxx).

The variable (h) in word-initial position is correlated with social strata variation and stylistic variation. Therefore, variable (h) is a marker in the speech community of SMD as it plays some consequential role in the marking of social strata difference especially between the working classes and the middle classes, in less formal stylistic variations.

(b) WORD-MEDIAL /h/

This study shows that in word-medial position, variable (h) is realised the highest as [h] by most social strata in all stylistic variations except for LWC and MWC. This followed by the use of [ʔ] alternating with h-deletion [O] in different stylistic variations. All social strata use [h] at a minimum of 31.14% and a maximum of 100%, followed by [O] at a minimum of zero% and a maximum of 67.31%, and [ʔ] at a minimum of zero % and a maximum of 5.56% in different stylistic variations.

Table 9.14: Percentage Means of Variable (η) Word-Medial by Social Stratification and Stylistic Variation

Stylistic Variation	Variant	LWC	MWC	UWC	LMC	MMC
WLS	(η) ₋₁ = [h]	100.00	97.44	97.10	98.48	93.59
	(η) ₋₂ = [ʔ]	0.00	1.28	2.17	1.52	1.28
	(η) ₋₃ = [O]	0.00	1.28	0.72	0.00	5.13

Table 9.14, cont.

Stylistic Variation	Variant	LWC	MWC	UWC	LMC	MMC
RPS	(η) ₋₁ = [h]	95.37	90.60	96.83	91.86	86.48
	(η) ₋₂ = [ʔ]	0.00	2.99	0.72	2.53	2.99
	(η) ₋₃ = [O]	4.63	6.41	2.44	5.62	10.53
FS	(η) ₋₁ = [h]	38.73	58.39	63.16	74.90	73.18

	(η)- ₂ = [ʔ]	5.56	2.60	0.00	2.08	1.39
	(η)- ₃ = [O]	55.72	39.01	36.84	23.01	25.43
CS	(η)- ₁ = [h]	31.14	47.85	53.28	59.49	59.61
	(η)- ₂ = [ʔ]	1.55	3.80	2.97	2.39	1.93
	(η)- ₃ = [O]	67.31	48.35	43.75	38.12	38.46

Among all the social strata, this lowest social group of LWC uses the least of [h] and thus they use the most percentage of [ʔ] in FS and CS. They also use the highest percentage of [ʔ] in FS. MWC uses the highest percentage of [ʔ] in RPS and CS. Interestingly, among all the social strata, UWC uses the most of [ʔ] in WLS as shown in Figure 9.86. MMC uses the least of [h] but the most of [O] among all the social strata in WLS and RPS. They also use the most of [ʔ] in RPS.

The indices for variable (η) by social stratification and stylistic variation lie between the scores of 100 to 236.17 as shown in Figure 9.11. These index scores of variable (h) in word-medial position are almost consistent with the use of (h)-₁, which is the [h] variant for WLS and RPS; and between (h)-₁ and (η)-₂, which are the [h] $\alpha\upsilon\delta$ [ʔ] variants for FS and CS.

The variable (η) has little correlation with social stratification as shown by the widespread lines in the less formal style. This is also supported by the significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as [h] and [O] word-medially between one social stratum and another, especially for LWC from the other classes in FS and CS as tested by One-Way ANOVA Test (Appendix Gxxi).

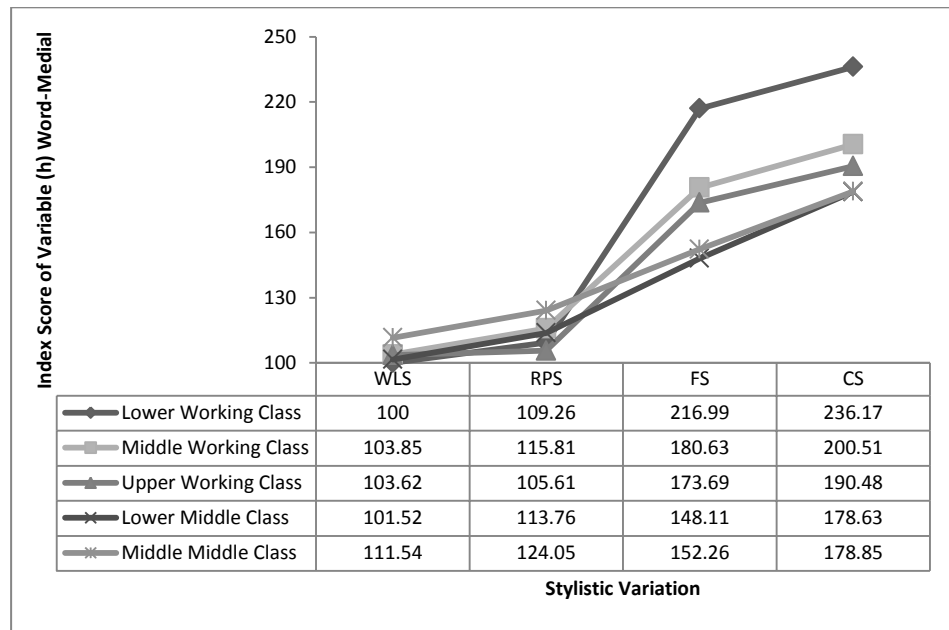


Figure 9.11: Index Score of Variable (η) Word-Medial by Social Stratification and Stylistic Variation

The index graph also illustrates that variable (h) is subject to stylistic differentiation, as all the lines rise in the less formal style. This is also supported by the significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as [ŋ], [ʔ] and [O] by social stratifications from one stylistic variation to another, particularly between WLS-RPS for LWC, MWC, LMC and MMC; between RPS-FS for LWC, MWC, UWC, LMC and MMC; and between FS-CS for UWC, LMC and MMC as tested by the Paired-Samples T-Test (Appendix Gxxii).

The variable (h) is correlated with social strata variation and stylistic variation in word-medial position. Therefore, variable (h) is a marker in the speech community of SMD as it plays some consequential role in the marking of social strata difference especially the lowest social group LWC from the other social classes in less formal stylistic variations.

(c) **WORD-FINAL /h/**

This study shows that in word-final position, variable (h) is realised more as [η], and equally less as [ʔ] and [O] by all social strata in different stylistic variations. All social strata use at least 86.74% and at most 96.66% of [h], followed by at least 1.24% and at most 10.07% of [ʔ], and at least 1.19% and at most 9.29% of [O], in different stylistic variations.

Table 9.15: Percentage Means of Variable (η) Word-Final by Social Stratification and Stylistic Variation

Stylistic Variation	Variant	LWC	MWC	UWC	LMC	MMC
WLS	(η) ₋₁ = [h]	89.32	94.08	96.66	92.31	92.90
	(η) ₋₂ = [ʔ]	1.39	4.44	1.67	3.85	5.32
	(η) ₋₃ = [O]	9.29	1.48	1.67	3.85	1.77
RPS	(η) ₋₁ = [h]	88.74	93.18	96.11	94.17	97.24
	(η) ₋₂ = [ʔ]	10.07	4.06	1.24	3.29	1.37
	(η) ₋₃ = [O]	1.19	2.76	2.64	2.54	1.38
FS	(η) ₋₁ = [h]	91.82	87.22	93.35	89.50	92.93
	(η) ₋₂ = [ʔ]	3.87	3.84	2.58	5.41	3.32
	(η) ₋₃ = [O]	4.31	8.94	4.07	5.08	3.76
CS	(η) ₋₁ = [h]	86.74	90.31	93.17	88.40	95.95
	(η) ₋₂ = [ʔ]	5.88	2.91	3.54	9.10	1.89
	(η) ₋₃ = [O]	7.39	6.77	3.29	2.50	2.17

Among all the social strata, this lowest social group of LWC uses the least of [h] in WLS and RPS. However, they use the most percentage of [ʔ] in RPS and CS, and [O] in WLS and CS. MWC uses the lowest percentage of [h] in FS but the highest percentage of h-deletion in FS, as well as in RPS. LMC uses the highest percentage of [ʔ] in FS. MMC uses the most of [ʔ] among all the social stratifications in WLS.

The indices for variable (η) by social stratification and stylistic variation lie between the scores of 104.14 to 121.72 as shown in Figure 9.12. These index scores of variable (h) in word-final position correspond to the use between (h)₋₁ and (η)₋₂, which are the [η] ανδ [ʔ] variants for all social stratifications.

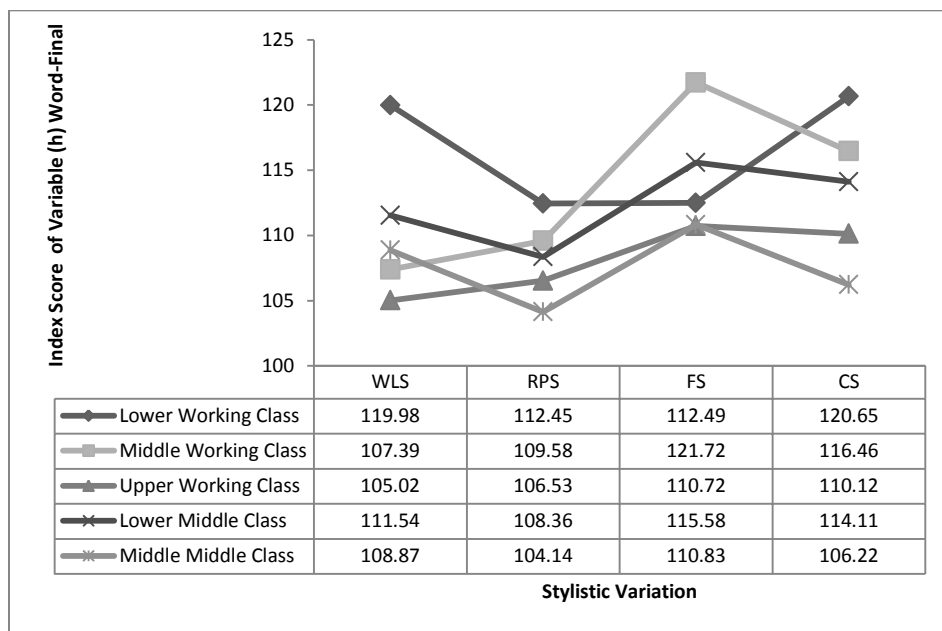


Figure 9.12: Index Score of Variable (η) Word-Final by Social Stratification and Stylistic Variation

Figure 9.12 shows that the variable (η) has little correlation with social stratification. This can also be seen in the clear space separating these classes although they are crossing each other. This is also supported by the significant percentage differences at 5% level ($p < 0.05$) of variable (η) realised as [?] and [O] word-medially between one social stratum and another particularly the two lower classes of LWC and MWC in most stylistic variations except for FS as tested by One-Way ANOVA Test (Appendix Gxxiii).

Although there are significant percentage differences at 5% level ($p < 0.05$) of the variable (η) realised as [η], [?] and [O] by social stratifications from one stylistic variation to another especially between RPS-FS for MMC; between FS-CS for MMC tested by the Paired-Samples T-Test, the variable (h) is not subject to stylistic differentiation as all the lines are inconsistently rising and dropping (Appendix Gxxiv).

The variable (h) in word-final position is correlated with social strata variation but not stylistic variation. Therefore, variable (h) is an indicator in the speech community of SMD. It plays some consequential role in the marking of social strata difference especially the working classes from the middle classes.

9.6 CONCLUSION

In conclusion, the variable (h) is realised the most as the [ŋ] variant then the [ʔ] and [O] variants in all three word positions. The indices of the variable (h) are ranging from the score 100 to 205.70 in word-initial position; 100 to 242.27 in word-medial position; and 100 to 134.48 in word-final position.

In word-initial position, the variable (h) is realised the most at [h] and followed by [O]. It is never realised as the [ʔ] variant in word-initial position. In most cases, the phoneme /h/ as in /hati/ 'liver' is either realised as [hati] or [ati] but never as [ʔati] by the speech community of SMD. Inserting a glottal stop in word-initial position is not a common feature of SMD as it is quite difficult to articulate. Thus, the variable (ŋ) is realised as [ŋ] range from zero to 100%, [O] range from zero to 100% and zero% of [ʔ] in word-initial position.

In word-medial position, the variable (h) is realised the most as [h] followed by [O] and then [ʔ]. In most cases, the speech community of SMD would either pronounced the word such as /paha/ 'thigh' or /tahu/ 'know' as [paha], [paa] or [paʔa]; and [tahu], [tau] or [taʔu]. In this study, it is easy to have h-deletion then to have ʔ-insertion in word-medial position. This can be seen in the figures as the variable (ŋ)

is realised as [ŋ] ranging from zero to 100%, [O] ranging from zero to 100% and [ʔ] ranging from zero to 100% in word-medial position.

In word-final position, the variable (h) realised highest as [h] followed by [ʔ] instead of [O] h-deletion, as leaving an open syllable in word-final position is not a common feature of SMD (see Chapter 13 for h-insertion and ʔ-insertion in open syllable word-final position). In most cases, the speech community of SMD would pronounce the word /sabah/ itself, either as [sabah] or [sabaʔ], but seldom leave it as an final open syllable such as [saba]. The variable (ŋ) is realised as [ŋ] ranging from zero to 100%, [ʔ] ranging from zero to 100% and [O] ranging from zero to 54.55% in word-final position.

The variable (h) does not correlated with gender and ethnic group variations. However it is correlated with age variation especially in word-initial and word-medial positions, the younger the age group the more they will use [h] and the older the age group the more they use [ʔ] or [O] instead of [h]. The breakdown age line is between 15-44 and 45-64 year olds. The Variable (h) is correlated with social strata variation as the higher the social stratum, the more [h] but less [ʔ] and [O] are used.

There is a strong correlation between stylistic variation and all social variations of gender, age, ethnic group, and social strata in the variable (ŋ) in word-medial position; age, ethnic group and social strata variations for in word-initial position; and age and ethnic group variations in word-final position. The less formal the stylistic variation, the less [h] and the more [ʔ] and [O] is used. This is becoming obvious in

FS and CS, regardless of social groups, the percentage use of [h] is decreased while the percentages of [ʔ] and [O] are increased.