

( , )

』, 2000, 5, 2, 159-175.

『 20

(1)

(2) , (3) ,

가

가

PTA,

(CN VIII)

(mild) (profound)

가

(Bamford & Saunders, 1985; Carney & Moeller, 1998).

가

가

(Berg, 1976).

1978; Calvert & Silverman, 1983).

(Ling & Ling,

(Boothroyd,

1984; Martony et al., 1972)

가

al., 1988)

(Erber, 1972; Busby et

가, (Carney & Moeller, 1998).

가, 가

가 가  
가 가

가, & Osberger, 1978).

(Markides, 1970; McGarr

PTA (Pure Tone Average)

가

가

가

Markides, 1983; Monsen, 1978; Weisel & Reichstein, 1989)

(Erber & Alencewicz, 1975;

가

PTA,

PTA,

가

가

PTA

, PTA

1.

20  
 PTA가 91 dB (ANSI, 1989)  
 PTA 0.5, 1, 2 KHz 4  
 5-10  
 PTA 98.3 dB 68.5 dB

2.

가 7 3 가 18  
 54 (18×3) 21 (7×3) 75 1  
 75 가 5  
 (/a/, /u/, /i/)

3.

가.

가  
 15-35 1 m 가  
 75 dB A “+”  
 60 dB A  
 가 15 dB SL  
 (Most & Frank, 1991).

.93

가  
 가 ( ) ( )  
 ), ( ) '가( ) ' '( )  
 ,  
 가 ( ), ( )  
 ( ) ,  
 ) ' '( )  
 ,

4.

PTA,  $t$  가  
 Pearson

1.

가.

< - 1 >

가

< - 1 >

	/a/	/u/	/i/	
	5.56	3.33	4.44	4.44
	5.10	4.56	4.63	4.78
	8.57	7.14	5.71	7.14
	11.73	11.82	8.55	10.68
	7.06	5.24	5.08	*
	9.05	9.05	6.81	

\*

가

가

< - 2 >

가

( $F = 3.17, p < .05$ ), Scheffé

가

< - 2 >

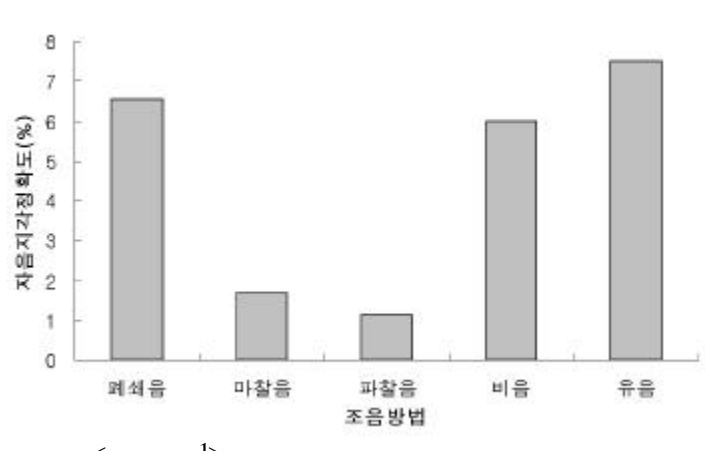
8.61	4.00	1.11	6.67	3.33	4.74
9.45	4.27	3.42	6.84	10.26	7.68

< - 3>  
 가 (F = 4.20, p < .05), Scheffé  
 가 . < - 1>

(6.67 %) 가 (4.33 %), (2.33 %)

< - 3>

6.53	1.67	1.11	6.00	7.50	4.56
4.25	5.44	3.42	6.81	10.08	6.84



< - 1>

가

t 가 (t = -.53, p < .001).

, t

< - 4>

< - 4>

, t

			t
	17.00	4.66	
	24.53	8.34	-4.532***

\*\*\*p < .001

2.

가.

< - 5>

가

(F = 7.87, p < .001),

Scheffé

/a/ /u/, /a/ /i/

가 .

< - 5>

	/a/	/u/	/i/	
	36.39	25.56	26.39	29.44
	19.37	17.04	14.29	17.46
	48.57	27.86	27.14	34.52
	25.56	24.29	20.15	25.13
	42.48	26.71	26.77	*
	23.22	20.75	17.25	

\*

가

가

< - 6>

가

(F = 6.29, p < .001), Scheffé

가 .

< - 6 >

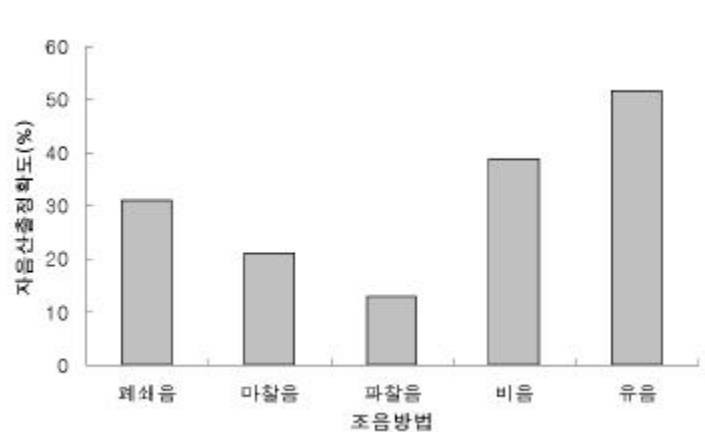
43.61	30.83	12.78	22.00	45.00	30.84
16.94	15.70	16.23	24.19	40.86	27.22

.

< - 7 > 가 (F = 6.291, p < .001), Scheffé 가 . < - 2 > 가 (30.33 %) 가 (24.17 %), (20.67 %)

< - 7 >

30.97	21.11	12.78	38.78	51.67	31.06
16.10	18.35	16.23	27.51	26.44	25.10



< - 2 >



	<i>t</i>	가	가 ( $t = 3.37, p < .001$ ).
< - 8>	.	,	<i>t</i>
< - 8>	,	<i>t</i>	
			<i>t</i>
	56.80	16.23	
	52.47	16.98	3.368***

\*\*\* $p < .001$

### 3.

PTA, 가  
 Pearson . PTA , PTA  
 , 가 .

·  
 , /i/ . /a/ 가 /u/

· CV VC  
 Owens et al. (1972) , 가

가 . 7 가  
가 가 . , 가  
, 가 .  
가 .  
, 가 , 가 ,  
가 가 .  
가 , 가  
가 가  
가 가 ,  
가 가 .  
가 가 .  
800 Hz (Lieberman, 1957),  
가 가  
가 가 가  
가 가 가  
( , 1990),  
가  
가 가  
/s/ 3000 Hz  
/s/  
가 , 가  
, Busby et al.  
(1988) Flynn et al. (1998)

(transition),

F<sub>2</sub>

F<sub>2</sub>

가

/a/

가

/u/

, /i/

가

, /a/ /u/, /a/ /i/

가

가

가

(Monsen, 1976). Mangan (1961)

Nober (1967)

. Boone (1966)

. /a/

[+ ]

[+ ]

가

/u/

/i/

, /a/

. Abraham (1989) Boothroyd (1985)

7

가

가

가

가

가

가

가

가 . Nober (1967)

가 ,

al. (1968)

가 . Huntington et

/h/

가 ,

. /h/

가 가

(Gimson, 1980).

Abraham (1989), Nober (1967)

가

가

가

가 가

가

가

가

가

가

가

75 %

가

66.67 %

가 . 3000 Hz  
/h/ , /s,  
s' 가

가 가  
(47.22 %) 가 (26.11 %) (25.00 %)  
(16.67 %) 가 (9.33 %),  
(18.33 %), (11.67 %), (9.33 %)  
(Abraham, 1989; Oller et al., 1978)

가 ,  
가

(Busby et al., 1988; Erber, 1972; Hack & Erber, 1982).

가

가 . PTA,  
가  
(14.67-70.67 %) (2.67- 12.00 %) PTA (92.5- 108.8 dB)

PTA

Erber (1974) PTA  
가

(Erber, 1974; Geers, 1994).

가

가

PTA

PTA

PTA

(Monsen, 1978; Weisel & Reichstein, 1989)

PTA가

(Markides, 1983).

. Boothroyd (1984)

55-74 dB, 75-89 dB, 90-104 dB, 105-114 dB, 115-124 dB

가

가

(Most & Frank,

1991)

가

가

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ABSTRACT

A Study of Consonant Perception and Production  
by Children with Profound Sensorineural Hearing Loss

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The purpose of the present study was to analyze the consonant perception and production in Korean by children with profound sensorineural hearing loss, and to investigate the relationships among the consonant perception, consonant production, and degree of the hearing loss. Twenty hearing-impaired children (HI), whose ages ranged from 7 to 13 years, participated in the experiment. All of the subjects were given two tests: the consonant perception and production test. The results of the experiments were as follows: (1) HI's perception scores of consonants were significantly different with respect to the articulation places and articulation manners, but were not different with respect to the vowel contexts and positions of the syllables, (2) HI's perception scores of articulation place features were significantly lower than those of articulation manner features, (3) HI's production scores of consonants were significantly different with respect to the vowel contexts, articulation places, and articulation manners, but were not different with respect to the positions of the syllables. (4) HI's production scores of articulation place features were significantly higher than those of articulation manner features, (5) Pearson's Correlation Coefficients showed that the correlations were not significant between any pairs of PTA, HI's perception scores of consonants, and production scores of consonants.

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