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	38
Abstract	42

1.	1	9
2.	가	10
3.	2	13
4.	3	15
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2. , - , - , 가

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가

·
(gesture)

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·³⁾

9-10

(preverbal behavior)가

4) () (5.6)

(sensorimotor act)

7)

4)

Austin⁸⁾

“perlocutionary stage”,

(vocalization)

“illocutionary stage”(9),

“locutionary

stage”(13)

Bruner⁹⁾

1

가 “

(innate communicative intention)” (a)

“ (behavior regulation)”, (b)

(social interaction)”, (c)

“ (joint attention)”

(rejection),

(request),

(comment)

, , ,
 .¹⁰⁾
 가
 “protoword” .¹¹⁾
 가
 가
 가 “low-structured observation”
 (communication temptation
 tasks) 가
 .^{12,13)}
 .¹⁴⁾
 가
 ,
 가
 ,
 . Lord¹⁵⁾
 3
 . Minear¹⁶⁾
 , , , , , , ,
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 가
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17,18) ,
가 19)

. Pinder, Olswang, Coggins²⁰⁾

20 , 가
(prelinguistic signal) 가
(single-subject study) . Olswang Pinder⁴⁾ 11
13 가 4
가 . Pinder
Olswang²¹⁾ 가
가

1

가 가

, 가 , 1 가

가

가 ,

1.

가 가?

2.

, - 가 가?

3.

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4.

(speech) 가 가?

5.

가 가?

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1.

1.

13 24 18
 (: 9 , : 9)
 (spastic quadripegia) 13 , (spastic dipegia)
 5 . , 가
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 1-2 ,
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 13 24 18 (: 9 , : 9)
 . 13 18
 , 19 24
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1. 1 1

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	1	1	1	2
	3	3	4	3
	4	4	5	5

1	.		
2	13	18	.
3	19	24	.

2.

가.

가

“Communication and Symbolic Behavior Scales(CSBS)”⁽²²⁾

, 가 . CSBS

(warm-up),

(communicative temptations task),

(sharing books)

가 2 .

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가 , 가

가 . 3 (가

, ,) .

2. 가

	가
	(behavior regulation)
(communicative functions)	(social interaction)
	(joint attention)
	(gestures)
(communicative means)	(gesture+vocal)
	(vocal)
	(syllables with consonants)
(vocal)	(multisyllables)
	(single word)
	(multiword)

“The Bayley Scales of Infant Development-Second Edition(BSID-II)”²³⁾ , “CSBS procedure”

가

가

“BSID- ” 40-60 ,
 30 , “CSBS procedure” ,
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 20 . Sony AC S-25 .
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 가 ,
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 가 ,
 가 ,
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 .
 10%(4) ,
 “CSBS” 2 가 video tape
 가 , 93.59% .

·
SPSS (version 9.0) ·
, , ,
(two-way ANOVA) ·
가
(MANOVA) . 0.05 .

2.

1.

가 .

가

"The Bayley Scales of Infant Development-Second Edition(BSID-II)" "The Mental Scale"

10 . 1
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 6 , 8 12 4 (: 2 , : 2) 가 . 14 24
 10 (: 5 , : 5) ,
 5 , 5 . 9
 21 10 (: 5 , : 5) .

3. 2 '1

	2	3
	3	2
	5	5

2.

가.

(1) 가

1 .

(2) 가

"The Bayley Scales of Infant Development-Second Edition(BSID-)"
"The Mental Scale" .

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(Pearson correlation) . 0.05

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3.

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 12 (: 6 , : 6) ,
 9 , 3 . 9 24
 12 (: 6 , : 6) .

4. 3 1

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	4	5
	6	6

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2.

가.

1. .

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1. .

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1. .

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(one-way ANOVA)

가

(MANOVA)

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0.05

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1.

1.

(5), 가
 가 가 . ,
 (6).
 BSID- Mental scale
 (107, 130) (78.5,
 100) .

5.

1

	2	3
	19.13 ± 6.23	30.30 ± 4.26
	44.00 ± 6.18	50.10 ± 3.11

¹ ± .
² 13 18 .
³ 19 24 .

6.

				F
	663.17	1	663.17	3.116
	4435.24	1	4435.24	20.841*
*	57.24	1	57.24	0.269

* : $p < 0.05$

2. - , + , -

, , , 가

가 , , 가

가가 (7).

, ,

가 (8).

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, (1).

7.

1

		³	8.63 ± 4.12	20.00 ± 4.62
		⁴	14.70 ± 2.62	15.00 ± 2.86
	+	²	10.50 ± 3.03	16.50 ± 3.06
			15.10 ± 3.78	26.00 ± 3.88
			0.00 ± 0.00	6.88 ± 1.56
			0.50 ± 0.50	11.00 ± 3.39

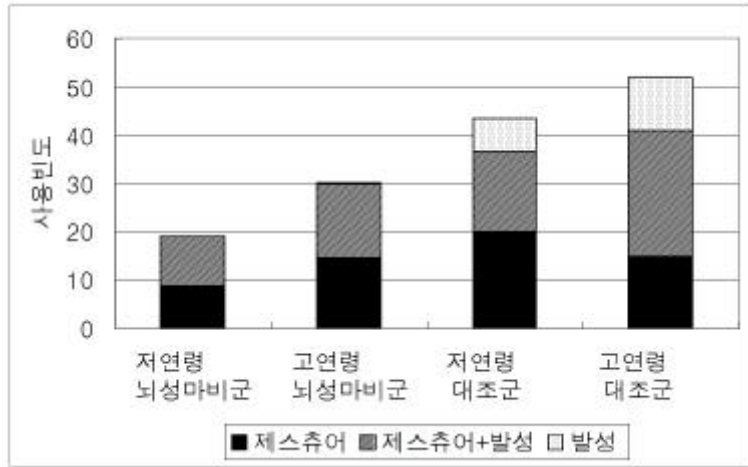
1			±	.
2				.
3	13	18		.
4	19	24		.

8.

					F
			2.568	1	2.568 0.023
	+	¹	441.800	1	441.800 3.847
			47.5359	1	47.5359 1.275
			302.901	1	302.901 2.771
	+		634.689	1	634.689 5.527*
			670.868	1	670.868 17.989***
			272.568	1	272.568 2.493
*	+		53.356	1	53.356 0.465
			29.201	1	29.201 0.783

* : $p < 0.05$, *** : $p < 0.001$

1



1.

3.

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가

가

가

가 (9).

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(10).

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가 .

9.

1

	²	14.38 ± 4.59	28.88 ± 3.57
	³	20.90 ± 4.08	21.70 ± 3.49
		0.25 ± 0.16	2.13 ± 0.83
		1.60 ± 0.79	3.70 ± 0.91
		4.50 ± 2.64	13.00 ± 5.14
		7.80 ± 2.61	26.60 ± 4.20

1	,	±	.
2	13	18	.
3	19	24	.

10.

				F
	0.939	1	0.939	0.007
	19.012	1	19.012	3.560
	634.689	1	634.689	4.988*
	520.200	1	520.200	3.711
	35.113	1	35.113	6.576*
	1656.200	1	1656.200	13.015***
	417.089	1	417.089	2.975
*	0.112	1	0.112	0.021
	235.756	1	235.756	1.853

* : $p < 0.05$, *** : $p < 0.001$

4.

,
 (11). 가
 가가
 ,
 가
 (12, 13).

11.

	²	2.15 ± 1.34	9.50 ± 2.93
	³	5.90 ± 2.12	29.00 ± 4.79
		0.88 ± 0.64	10.25 ± 2.60
		4.90 ± 1.74	27.50 ± 4.40

¹	, ±	.
²	13 18	.
³	19 24	.

12.

				F
	1203.835	1	1203.835	12.623 ^{***}
	2063.835	1	2063.835	21.641 ^{***}
*	549.501	1	549.501	5.762 [*]

* : p<0.05, *** : p<0.001

13.

				F
	1005.835	1	1005.835	13.313***
	2272.001	1	2272.001	30.071***
*	388.668	1	388.668	5.144*

* : $p < 0.05$, *** : $p < 0.001$

5.

가가 (14). , 가
, (15, 16). , 가

14.

1

	²	0.00 ± 0.00	6.63 ± 2.87
	³	3.50 ± 1.19	23.00 ± 4.14
		0.00 ± 0.00	0.25 ± 0.25
		0.40 ± 0.40	5.80 ± 1.68

¹	,	±	.
²	13	18	.
³	19	24	.

15.

				F	
		877.812	1	877.812	13.185 ^{***}
		1516.701	1	1516.701	22.782 ^{***}
	*	368.368	1	368.368	5.533 [*]

* : $p < 0.05$, *** : $p < 0.001$

16.

				F	
		78.672	1	78.672	9.273 ^{**}
		70.939	1	70.939	8.361 ^{**}
	*	58.939	1	58.939	6.947 [*]

* : $p < 0.05$, ** : $p < 0.01$

2.

(37.9 ± 6.92)

(34.2 ± 3.29)

($r=-0.053$, $p>0.05$)

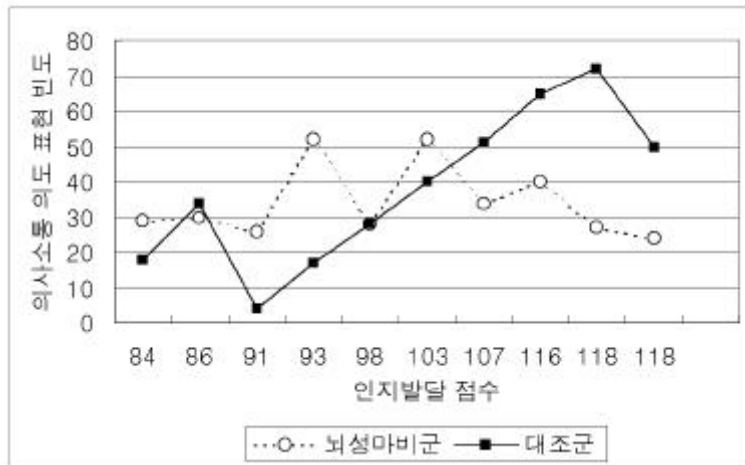
($r=0.840$, $p<0.05$)

가 가

가

가

(2).



2.

3.

1. - , + ,
-

가 (17).

(3),

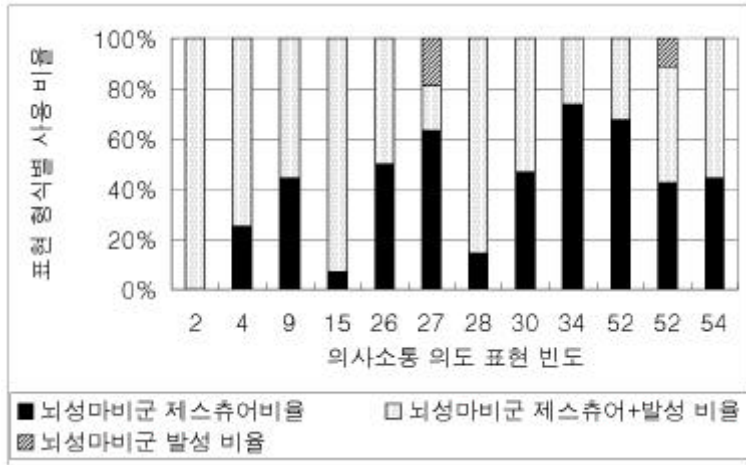
(4).

17.

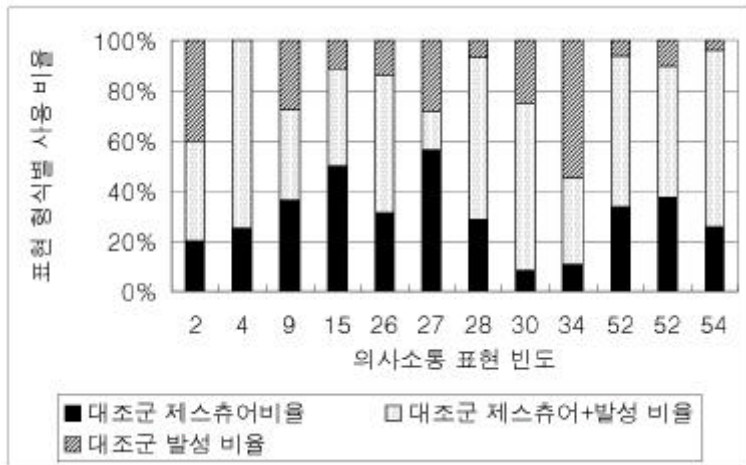
			F
	13.33 ± 3.33	8.50 ± 1.78	1.639
+	13.50 ± 2.64	15.33 ± 3.40	0.182
	0.92 ± 0.62	5.00 ± 1.62	5.545*

±

* : $p < 0.05$



3.



4.

2. - , ,

-

(18).

18.

1

			F
20.50 ± 4.16	19.67 ± 4.46		0.019
0.58 ± 0.26	1.00 ± 0.30		1.096
6.67 ± 2.26	8.00 ± 2.70		0.143

1 , ± .

3.

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가 (19).

19.

		F
6.17 ± 2.40	9.25 ± 3.26	0.582
4.33 ± 1.93	10.33 ± 2.90	2.971

, ± .

4.

가 (20).

20.

		F
3.00 ± 1.44	5.00 ± 2.34	0.528
0.33 ± 0.33	2.00 ± 1.07	2.227

, ± .

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가 .

가 가

가 가

가

가 .

가

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19,24,25)

가

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가

가 .

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가 .

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2 ,

가

4 ,

가

4

가

가

가

. Pinder Olswang²¹⁾

가

. Olswang Carpenter⁶⁾

가

가

(hypersensitivity)

가

(preverbal functional

communication)

가

가

가

가 .
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, . 가 ,
가 .
가 .
가 .
가 . Whetherby, Cain,
Yonclas, Walker¹⁰⁾
가 .
가 가 .
가 가
, . 가
가 가
가 .
가 .
가 .
가 .
가 .
가 .

26,27,28,29)

29,30)

가

가

Whetherby, Cain,

가

Yonclas, Walker¹⁰⁾

(, ,)

가

. Coggings, Olswang,

Guthrie³¹⁾

가 ,

(request)가

,

(comment)가

(responsive)

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 (,
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 가 .
 ,
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 Levin²⁶⁾ 1
 (babbling) ,
 (canonical babbling) , (phonetic
 repertoires) 가 , (monosyllabic utterances)
 .
 -
 3-4 가 ,
 .
 ,
 가 ,

가

가

가

Denhoff Holden³²⁾ 100

27

37

1

6

Byrne³³⁾

15

36

78

가

가

가

Whetherby, Cain,

Yonclas, Walker¹⁰⁾

가

가

Bruner⁹⁾

(prelinguistic stage)

가

가

13

24

가 , ,
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Abstract

Study on early communication behavior of children with spastic cerebral palsy

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(Directed by Professor Eun Sook Park)

Normal children around the age of one year start showing communicative intent through nonverbal communication and its frequency increases as the child gets older. After the first year his nonverbal communication develops into verbal communication. Language development of children with cerebral palsy with other associated disabilities could be delayed. The development of nonverbal communication and the early stages of language with cerebral palsy could be the index to the language difficulties that could be present as the child grows to the linguistic stage. A study on this area could be of help to the early assessment and treatment of language problems of children with cerebral palsy.

This study examines the nonverbal and verbal communications of children with cerebral palsy. The subjects consists of 18 one-year-old children with spastic cerebral palsy as the test group and 24 normal children who were age-matched as the control group. The expression of communicative intent, communicative means, communicative function were compared as well as frequency in the use of consonants, multisyllables, words, word association.

The results were as follows :

1. When the expression of communication intent was compared with the children on age-matched control group, its mean frequency was lower in the children with cerebral palsy. When cognitive development scores were matched, the normal children showed positive correlation between the cognitive development scores and the frequency of expression of communicative intent. On the other hand, children with cerebral palsy showed great individual differences and the range of the score was different from that of the normal subjects.

2. When the communicative means (gesture, vocalization with gesture, vocalization only) was compared, normal subjects showed impartial use of all three patterns while children with cerebral palsy mostly used gestures and vocalization with gestures.

3. When communicative function was compared, normal subjects showed behavior regulation and joint attention while children with cerebral palsy mainly showed behavior regulation and less joint attention. In comparing the communicative function in the two groups that showed the same frequency of communication, significant difference could not be seen.

4. Children with cerebral palsy showed less use of consonants and multisyllables than the normal subjects.

5. Children with cerebral palsy showed less use of words and word associations than the normal subjects.

In this study we could see that the communicative development of children with cerebral palsy at the period of transition where nonverbal

communication develops into verbal communication is different from that of normal children. This study was restricted to only one age group and one type of cerebral palsy. Further works are required considering more types of cerebral palsy and the severity of cerebral palsy.

Key Words : children with cerebral palsy, nonverbal · verbal communication