

유분증 이동을 위한 배변훈련프로그램의 효과 연구

THE EFFECTIVENESS OF TOILET TRAINING PROGRAM FOR CHILDREN WITH ENCOPRESIS

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요 약 : (changing conditions design and changing criterion design) 2

가  
12 13

follow - up

가

중심 단어 :

서 론

condary encopresis)

가 가

가

<sup>5)6)</sup> American Psychiatric Association<sup>5)</sup> 4

가

3

1

가

가

가

1-3)

Weisenberg가 1926

3) ;

4)

6) ;

5) ;

(primary encopresis)

(se-

5).

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7)8) . 5 1% 가 9) .  
6)9) . 2  
6)7)9) , 가  
, 가 6) . 14)15) . 2 25%  
가 Brazelton<sup>14)</sup> 2  
2 Stehens Silber<sup>15)</sup>  
2~5 . McTaggart Scott<sup>3)</sup>  
10) . 12 10 6  
8) . Le-  
vine<sup>1)</sup> 18 102  
40 가 . East African Digo  
가  
. 5~6  
3)8) . 가 16) .  
11) . Smeets<sup>17)</sup> 1 4 가 1  
“ ”  
2)11) . Levine<sup>6)</sup> 16)17) .  
79%가 가 1)12) , 1) .  
가 1)4)8)11)13) , history -  
가 가 taking  
가 , (bowel move- 3)7) .  
ment) 28 가 13)14) . ,  
24 , 9) . (organic) 가  
14) . 6) .  
(physiological) , 9)17) , biofeed-  
back<sup>13)</sup> , 18) , dietary<sup>19)</sup> , 3)  
가 가

가 4)6)9)

K

가

9) O Brien 12)

(primary diurnal and nocturnal encopresis) 4

Levine Bakow<sup>7)</sup>

가

가

가

가

9)18)

가

가

13)15)20)

가

가

가

Levine Bakow<sup>7)</sup>

가

가

incontinence

fecal  
Loening - Baucke<sup>13)</sup>

1. 배변훈련 프로그램

1) 목표행동

가

가

가

가

사례연구

10

2) 자료수집

1

사 례 1 :

7

1 가  
2 가  
가 ( modeling),  
(physical prompt)

3) 실험설계 및 절차

가 (self - instru-  
tion) 5  
(Changing conditions design)  
(Changing criterion design)

가  
21) 가  
(verbal prompt) ( ? ...).  
가  
(1) 5

prompt , 5

10 가  
10 가  
10

(2) 3) ( )

4: 5

5

가 (FR-1)

(

)

( ,

)

5: 10

10

1: 5

가 5 가

가 (FR-3)

(FR-1) (

) ( )

Follow - up

( , , ) ( )

가 follow - up

2: 10

가 10 가

가 (FR-1)

(

)

3: 5

5

가 (FR-1)

(FR- 가 <Fig. 1>

functional relationship) 1(A)

<Fig. 1> (slope) 1 (B)

(plateau line) (gradual slope) 가

2 (C) 3 (D)

2(E) 2 3 (steep slope)

가

1 , 2

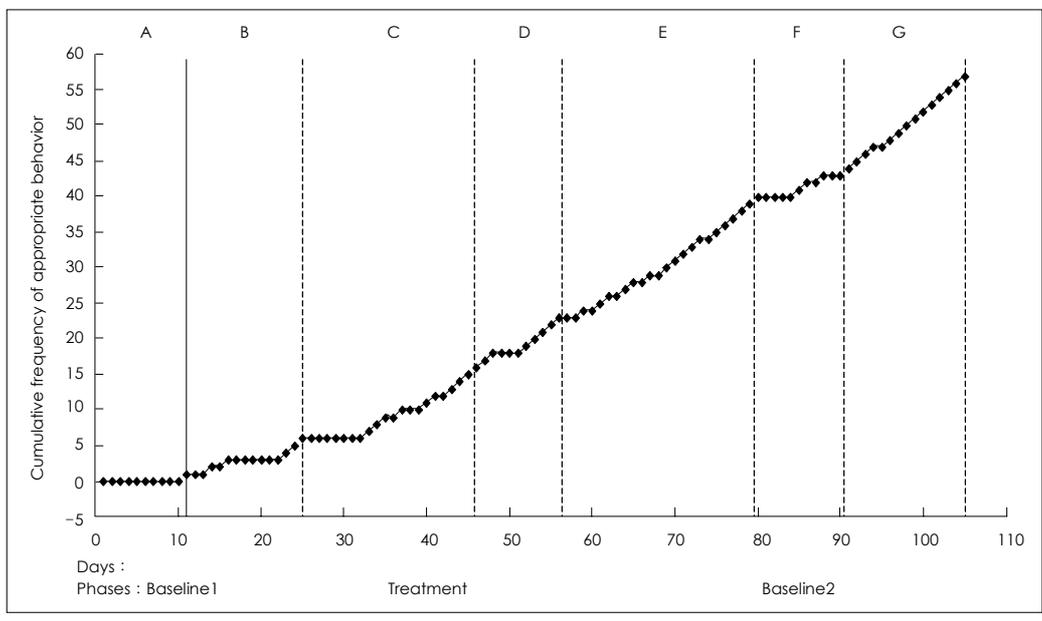
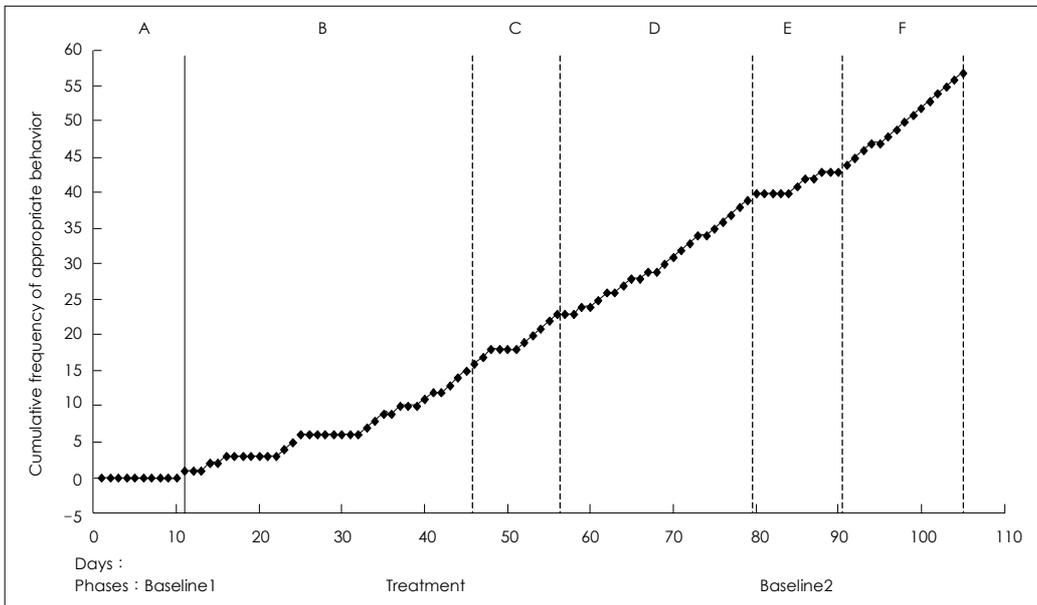


Fig. 1. Cumulative records of adequate toileting behavior frequencies across training conditions. A : baseline phase, B : directive instruction phase, C : indirective instruction phase, D : self-instruction phase, E : baseline recovery phase, F : self-instruction phase.

(G)

10 Follow - up  
 Follow -  
 <Fig. 2> up 15  
 가 가  
 (Fig. 2B)  
 가 10 (Fig. 2C)  
 5  
 (Fig. 2D) 5 (Fig. 2E) 가  
 사례 2  
 5 10  
 (Fig. 2B, C)  
 가  
 가



**Fig. 2.** Cumulative records of adequate toileting behavior frequencies across target behavior criteria. A : baseline, B : five successes, C : ten successes, D : five-in-a-row successes, E : two five-in-a-row successes, F : baseline recovery, G : ten-in-a-row successes.

5 가 , 가 .

2 가 가 가

3) 실험설계 및 절차

가

가 가 가

1 가 (1) 가 4

가

1. 배변훈련 프로그램

1) 목표행동

19 가

가

가

15

2) 자료수집

1: 가 3 /3

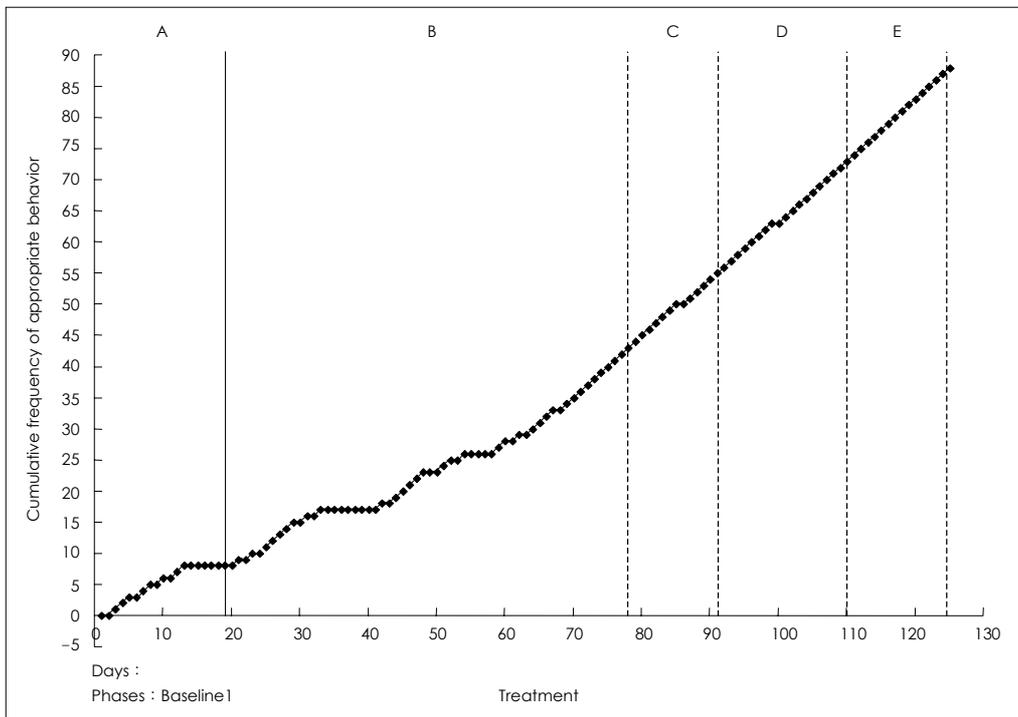
가 3

3

1 가 (FR-1)

( , ,

) 가  
 가  
 ( , )  
 2 : 5 /2  
 5 Follow - up  
 Follow - up 가  
 가  
 (FR - 3), (FR - 1)  
 ( )  
 2. 배변훈련 프로그램의 결과  
 3 : 10 /1  
 13 . <Fig. 3>  
 가  
 (FR - 3)  
 ( )  
 <Fig. 3> A  
 4 : 15 /1 (B E)  
 15



**Fig. 3.** Cumulative records of adequate toileting behavior frequencies across target behavior criteria. A : baseline, B : three-day-in-a-row successes(3 times), C : five-day-in-a-row successes(2 times), D : ten-day-in-a-row successes(1 time), E : fifteen-day-in-a-row successes(1 time).

follow -  
 up 가  
 (3 가 57  
 /3 -Fig. 3B)  
 (5 /2 -Fig. 3C) 13 , 고 찰  
 (10 /1 -Fig. 3D)18 ,  
 (15 /1 -Fig. 3E) 15  
 가  
 (48 ), (3 ), (8 ), 7).  
 (0 )  
 3)6).  
 가 가 1).  
 가 (single - subject design)  
 2  
 가 21).  
 1  
 , 2  
 가 4)7)  
 ( 3 /3 가 가  
 ) 가 가 9).  
 7)20)  
 , Follow - up 2  
 , 가  
 and autonomy stage) 가 (training  
 가 6).

retention - pain cycle) . (pain -

7)14)16)

가 1 가 11).  
가 7)9)13) 가

가 【 (Changing condi-  
tions design)】 .

【 (Changing criterion de-  
sign)】 가 .  
2

가 .  
가  
3).

(intrinsic) ,  
(extrinsic)  
22).

가 가 20).

가 Levine Bakow<sup>7)</sup>

### References

- 1) **Levine MD**(1975) : Children with encopresis : A descriptive analysis. *Pediatrics* 56 : 412-416
- 2) **Loening-Baucke V**(1990) : Modulation of abnormal defecation dynamics by biofeedback treatment in chronically constipated children with encopresis. *J Pediatr* 116(2) : 214-222
- 3) **McTaggart A, Scott M**(1959) : A review of twelve cases of encopresis. *J Pediatr* 54 : 762-768
- 4) **Hatch TF**(1988) : Encopresis and Constipation in children. *Pediatr Clin Nor Am* 35(2) : 257-280
- 5) **American Psychiatric Association**(1994) : Dignostic and statistical manual on mental disorders 4th Ed, Washington DC
- 6) **Levine MD**(1982) : Encorpesis : Its potentiation, evaluation, and alleviation. *Pediatr Clin Nor Am* 29(2) : 315-330
- 7) **Levine MD, Bakow H**(1976) : Children with encopresis : A study of treatment outcome. *Pediatrics* 58(6) : 845-852
- 8) **Loening-Baucke V, Cruikshank B**(1986) : Abnormal defecation dynamics in chronically constipated children with encopresis. *J Pediatr* 108(4) : 562-566
- 9) **Howe AC, Walker CE**(1992) : Behavioral Management of Toilet Training, Enuresis, and Encopresis. *Pediatr Clin Nor Am* 39(3) : 413-432
- 10) **Knell SM, Moore, DM**(1990) : Cognitive behavioral play therapy in the treatment of encopresis. *J Clin Child Psychol* 19 : 55-60
- 11) **Partin JC, Hamill SK, Fischel JE, Partin JS**(1992) : Painful defecation and fecal soiling in children. *Pediatrics* 89(6) : 1007-1009

- 12) O'Brien S, Ross LV, Christophersen ER(1986) : Primary encopresis : Evaluation and treatment. J Appl Behav Anal 19(2) : 137-145
- 13) Loening-Baucke V(1996) : Encopresis and soiling. Pediatr Clin Nor Am 43(1) : 279-298
- 14) Brazelton TB(1962) : A child oriented approach to toilet training. Pediatrics 29 : 121-128
- 15) Stehbens JA, Silber DL(1974) : Parental expectations vs outcome in toilet training. Pediatrics 54(4) : 493-495
- 16) DeVries M, DeVries RM(1977) : Cultural relatively of toilet training readiness : A perspective from East Africa. Pediatrics 60 : 170-177
- 17) Smeets PM, Lancioni GE, Ball TS, Oliva DS(1985) : Shaping self-initiated toileting in infants. J Appl Behav Anal 18(4) : 303-308
- 18) Wright L, Walker C(1978) : A simple behavioral treatment program for psychogenic encopresis. Behav Res Ther 16 : 209-212
- 19) Olness K, Tobin J(1982) : Chronic constipation in children : Can it be managed by diet alone. Postgrad Med 72 : 149-154
- 20) Rappaport LA, Levine MD(1986) : The prevention of constipation and encopresis : A developmental model and approach. Pediatr Clin Nor Am 33(4) : 859-869
- 21) Alberto PA, Troutman AC(1991) : Applied behavior analysis for teachers. Macmillan Publishing Co
- 22) Forsyth BW, McCarthy PL, Leventhal JM(1985) : Problems of early infancy changes, and mothers' beliefs about their infants. J Pediatr 106(6) : 1012-1017

ABSTRACT

*Korean J Child & Adol Psychiatr 12 : 263-274, 2001*

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This article describes and illustrates cases the treatment of primary and secondary encopresis using a changing conditions and criterion design with two subjects. The dependent variables measured were increase in appropriate toileting behavior and decrease in inappropriate toileting behavior. After 12 and 13 weeks of treatment encopresis was completely eliminated. In a two-month follow-up and one year follow-up inappropriate toileting behavior was not reported. Appropriate toileting behavior was also reported generalized to settings outside the home.

**KEY WORDS** : Encopresis · Changing conditions design · Changing criterion design · Applied behavior analysis.