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(金東一)** , (申乙眞)** , (黃愛慶)****



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가

* 2001

(KRF-041-C00570)

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가 (, 2001; , 2001; , 2001; , 1998), 14가

Zimmerman Martinez-Pons(1986)

(, 2000; , 1999; , 1997) 가 . 가 가? 가 ?

(Zimmerman &

Martinez-Pons, 1988; Gajria & Salvia, 1992; Schunk & Gunn, 1986)가 ,

(analysis of analysis) (Glass, 1981).

, Multon (1991)

가

(1990)

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. Swanson (1998)

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1998

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가 , (, ,), 가

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$$ES(\text{Cohen}'d) = \frac{\overline{X}_e - \overline{X}_c}{S_p}$$

(\overline{X}_e : , \overline{X}_c :)

$$S_p^2 = \frac{(N_e - 1)S_e^2 + (N_c - 1)S_c^2}{N_e + N_c - 2}$$

(N_e : , N_c : , S_e^2 : , S_c^2 :)

4. (outlier)

(outlier)

가 .

, Turkey 'hinge' . Turkey 'hinge'

25% 75%

'hinge' 1.5

Winsorizing

(Dixon & Massey, 1969)

,

hinge

가 , hinge

가

1.75

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4

1.75

1.

44 ,

224 . < 1 > , , ,

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2.

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가

70

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가

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가

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가

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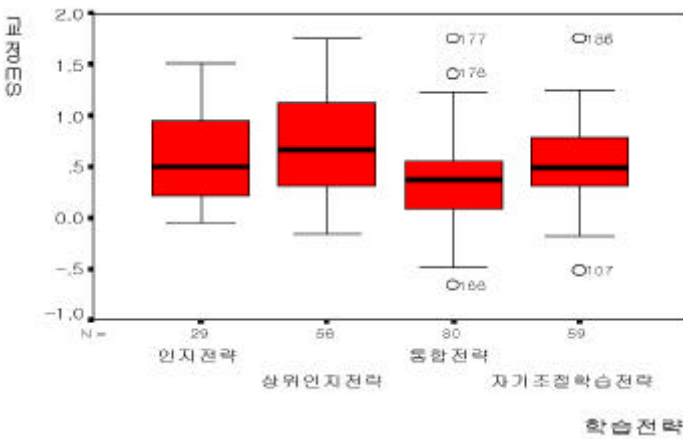
.46

[1] , ,

가

,

가



[1]

< 4>

4	.92	.55
21	.53	.44
1	.50	.00
3	.81	.58
29	.61	.46
21	.73	.54
21	.83	.32
3	.73	.38
11	.40	.60
56	.71	.49
14	.78	.50
9	.55	.28
49	.25	.35
8	.16	.51
80	.37	.44
21	.37	.23
8	.78	.38
14	.82	.29
16	.41	.48
59	.54	.39
224	.53	.46

5.

1)

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가 .63 .61

, .38

.26

가 7 ,

1

가

(.75)

(.67)

(48)

< 5 >

	4	.75	.47
	8	.67	.38
	5	.48	.35
	17	.63	.38
	16	.67	.50
	32	.88	.46
	35	.61	.45
	48	.41	.43
	131	.61	.48
	2	1.10	.39
	16	.37	.42
	27	.27	.47
	24	.44	.27
	69	.38	.42
	7	.26	.09
	7	.26	.09
	224	.53	.46

(.88) 가 , (.67) (.61)
가 (41) . (1.10)
가 , (.37) (.44)
(.27) .
가
가 .

2)

< 6 > . ,
(.74) (.59) , (.42)
(.49) 가
. (.83) (.70)
가 , (.51) (.39)
가 .
(.83) 가 , (.39)

(35)

(17)

가

가

.26

가

가

< 6>

1	.42	.
7	.74	.35
7	.60	.38
2	.49	.74
17	.63	.38
32	.83	.46
37	.70	.38
35	.39	.46
27	.51	.52
131	.61	.48
27	.39	.39
8	.83	.40
25	.35	.33
9	.17	.37
69	.38	.42
7	.26	.09
7	.26	.09
224	.53	.46

6.

1)

< 7>

가

,

가

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	24	.52	.41
	49	.71	.50
	49	.57	.42
	64	.36	.40
	186	.53	.45
	5	1.04	.53
	4	.58	.09
	9	.84	.45
	7	.70	.38
	6	.28	.18
	16	.39	.59
	29	.44	.50
	224	.53	.46

.53

.84

가

.44

가

(71)가 가

(1.04)

(70)

가 가

가

가

2)

< 8>

(58)

(.66)

가

(41)

(.44)

가

(.99)

(.81)

(.57)

(.78)

가

(41)

(.26)

(.19)

가

가

< 8 >

	51	.58	.46
	53	.66	.39
	59	.41	.41
	23	.44	.57
	186	.53	.46
	4	.99	.17
	2	.57	.10
	3	.81	.58
	9	.84	.53
	5	.41	.09
	6	.78	.37
	6	.26	.41
	12	.19	.41
	29	.44	.50
	224	.53	.46

.

44 , 224 .

.53 , 가

70 70%

50 70 가 , 가

. (71) (.61)

, (.54) (.37)

가 . (.63) (.67) 가

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가 .

(

), (53)

가 가 .

(.73), (.83), (40) 가

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, 가

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가 .63 .61 ,

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가

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가 . 가

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, 가 가

가 , .

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가 가 . 31

8 가 ,

가 가 .

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가

(.71)

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(.58)

가 ,

가 가

가 . ,

가

가 ,

가 가 .

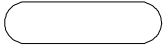
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(1998)				24	2, 3	
(2001)				26	6	
(2000)				4	3	
(2001)	3			5	3	
(1996)				8	5	
(1999)				3	4	
(2000)				4	5	
(2000)				5	2	
(1997)	Schema			9	4	
(1994)				1	4	
(1993)				3	6	
(1997)				3	2	
(1995)				5	5	
(2001)				2	4	
(1994)				4	4	
(1996)				2	5	
(2000)				4	6	
(1994)				5	5	
(2001)				3	5	
(1996)				4	2	
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(1992)	가			6	6	
(1993)				7	2	
(1999)				2		
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(1994)				3	6	
(1998)				1	6	
(1994)				4	5,6	
(1996)				2	5	
(1998)				2	4,6	
(1995)				12	2	
(1997)				1	3	
(2001)				3	6	
(2000)				1	5	
(1991)				2	6	
(1998)				7		
(2000)	가			4	4	
(2000)				1	6	
(2000)				1	6	
(1995)				3	6	
(1996)				5	3	
(2000)				6	4	
(2001)				14	2	

Abstract

A Meta-analysis of Effects of Learning Strategy*

Kim, Dong-il^{**}, Shin, EuJin^{***}, Hwang, Ae-Kyoung^{****}

The purpose of this study is to synthesize learning strategies intervention studies conducted in Korea from 1990 to 2001, using meta-analysis. This research is to identify the effectiveness of learning strategies. Meta-analysis provides a synthesis of research that allows a more precise determination of the effectiveness of a given intervention.

By criteria, 44 articles were selected and analyzed. Effect size was calculated using 'the Cohen's D'(Cooper & Hedges, 1994). The overall ES was .53. Cognitive strategy(.61), meta-cognitive strategy(.71) produced large effect sizes. But, the mean effect size of combined strategy(.37), self-regulated learning strategy(.54) produced the moderate effect size. While learning strategies applied on the academic achievement and cognitive ability were identified very effective approaches(.64, .67), learning strategies applied on efficacy of using learning strategies and general affective domain produced moderately effective(.40, .39).

The results of the study could be summarized as follows: First, the learning strategies turn out to be generally effective for the improvement of academic achievement and cognitive ability. Second, for the elementary school students, the interventions using the cognitive strategy and meta cognitive strategy was very effective. Third, through the detailed analyses of effectiveness of each strategy, we can provide the practical intervention plan for the students with academic difficulties. Lastly, the implications for the application of different learning strategies were discussed.

■ **Key Words** : learning strategy, cognitive strategy, meta-cognitive strategy, self-regulated strategy, combined strategy, effect size, meta-analysis

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