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STEBI-B

194

PSTE & STOE

PSTE

.STOE

ABSTRACT

Science Teaching Self-Efficacy of Preservice Elementary Teachers

The purpose of this study was to examine science teaching self-efficacy of preservice elementary teachers, as well as to investigate whether these beliefs are related to gender and secondary school major. The participants were 194 preservice elementary teachers from Islamic university in Gaza. Science teaching self-efficacy instrument STEBI-B were used to collect data. Findings revealed that most preservice teachers had moderate to high science teaching self- efficacy. Furthermore, there were significant differences between PSTE and STOE scores for males and females in favor of females. Furthermore, teachers of scientific section at secondary school demonstrated significantly higher PSTE scores than those of literary sections, but there were no significant differences between

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STOE scores for the same groups. This study recommended that elementary science teachers of scientific school section are more appropriate for teaching science. Moreover, male teachers should be reinforced during their preparation to improve their efficacy.

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.(NRC, 1996)

.(Committee on science, 2000)

.(AAAS,1997)

Stevens & Davis (2007)

2000

%30

.(Fulp, 2002)

.(2007 2007 2007)

TIMSS

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%54

%34 2003

.(2007)

.(Bandura, 1993)

.(Anthony& Artino, 2006)

.(Pajares, 2002)

.(Bandura,2007)

(Enochs et al., 1990; Bleicher& Lindgren,
2005 ; EL-Deghaidy, 2006; Stevens & Davis, 2007)

(Enochs et al, 1990 ;Tekkayya et .

. (al,2004; Hulya et al,2007

Bandura

(Palmer, 2006; Wan, 2006

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.(2004)

.(Wan, 1999)

.STEBI-B

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self efficacy

Bandura (1977)

response-outcome expectancies

efficacy expectation

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Bandura (1994)

mastery experiences

vicarious experiences

social persuasion

Somatic and Emotional State

emotional arousal

(Bandura,1977,1994) .

self- concept

self- efficacy

.(Pajares, 1997)

.(Pajares& Schunck, 2001)

. (Bandura, 1994)

.(2001)

...

. (Pajares, 2002)

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.(2006

(Semmar, 2006)

self- regulatory

processes

.(Pajares& Schunck, 2001)

.(Bembenutty, 2007)

Tschannen-Moran & Holy (2001)

(Pajares, 2002)

.(contagious)

social cognitive theory

reciprocal determinism

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.(Pajares, 2002)

(Tschannen-Moran ,2002)

. (Wan, 2006)

pedagogical content knowledge

Instructional representations

.(Stevens&Davis, 2007)

(Plourde, 2002)

students centeredness

.(El-Deghaidy, 2006 ; Finson et al, 2000)

(Schoon & Boone, 1998 ; Tekkayya et al, 2004;

.(Bleicher & Lindgren ; 2005

.(Morell, 2003; Mulholland et al, 2004 ; Bleicher& Lindgren ; 2005)

(Rigg,1991; Brandon,2000; Bleiche2000; Schunk & Pajares,2002)

...

.(2004 2007

(Brandon,2000)

(Pajares,2002)

(2004) .(Schunk &.Pajares,2002

Tschannen-
Moran,2002) Mulholland et al,2004 Cakiroglu et a ,2005; Cavas&
(Yilmas,2007

.(Pajares,)

Brandon(2000) 2002

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:(Finson et al., 2000) .1

135

DASTT-C STEBI-B

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:(Wingfield et al. , 2001) .2

STEBI-B

31

PSTE

STOE

: (Plourde, 2002) .3

59 STEBI-B

PSTE

STOE

:(Morell, 2003) .4

172

STEBI-B

PSTE

STOE PSTE

:(Mulholland et al., 2004) .5

STEBI-B

STOE

131

	...	
		314
	STEBI-B	
	PSTE	
		STOE
	PSTE	
STEBI-B	: (Bleicher, 2004)	.6
		290
	(Enoch & Riggs,1990)	
		STOE
		86
		PSTE
	()	
	: (Tekkayya et al. ,2004)	.7
STEBI-B		
		299
PSTE		
		.STOE
	:(Bleicher& Lindgren, 2005)	.8

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STEBI-B ()
49
PSTE
()
(STOE)
STOE
PSTE

:(Cakiroglu et al., 2005) .9

79 100
%78 %89 PSTE

STOE
:(El-Deghaidy, 2006) .10

36
DASTT- STEBI-B
C
STEBI-B
DASTT-C

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: (**Palmer, 2006**) .11

STEBI-B

55

(PSTEB & STOE)

11-8

: (**Yilmaz & Cavas , 2008**) .12

ABCC

STEBI-B

185

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56

42)

194

(152

423

: .2

. (Science Teaching Efficacy Belief Instrument Form B) STEBI-B

23 (Enochs & Riggs,1990)

(Personal Science Teaching Efficacy) PSTE

13

10 (Science Teaching Outcome Expectancy) STOE

(Bleicher , 2004)

STOE

5

1 2 3 4 5

20 19 17 13 10 8 6 3)

65 13 PSTE

.(23 21

.50 10 STOE

...

: .3

(El-Deghaidy, 2006)

0.75 PSTE 0.82

. STOE

.STOE 0.70 PSTE 0.78 Cronbach alpha

: .4

.SPSS

2x2

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48.98

PSTE

63 27

.(1) 46 16 35.78 STOE

:1

27	63	6.67	48.98	PSTE
16	46	4.35	35.78	STOE

2

(39)

%7.7

52

52 40

136

2009

%30.9

(% 92.3) % 61.4

10 STOE

(30) 50

40 40 31

% 19.1

% 72.1

. (2) %8.8 STOE

STOE PSTE

outcome expectancy

.(Morell, 2003)

.(Mulholland et al., 2004)

Bleicher & Lindgren (2005)

STOE PSTE

:2

	%0	-	26-13	PSTE
	%7.7	15	39-27	
	%61.4	119	52-40	
	%30.9	60	65-53	
	% 0.5	1	20 -10	STOE
	% 8.3	16	30-21	
	% 72.1	164	40 -31	
	%19.1	23	50-41	

...

(3)

23 22 21 8 2

PSTE

STOE

.() 3

15 4

3

2.87

10

.(Bandura,1977,1994)

.(Wan , 2006)

Bleicher & Lindgren, 2005; El-Deghaidy, 2006)

(Wingfield et al,2001; Plourde,2001)

.(Enoch et al, 1990)

3

PSTE& STOE

		STOE			PSTE
1.06	3.44	1	0.80	4.41	2
0.79	4.29	4	1.11	3.38	3

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		STOE			PSTE
1.30	3.29	7	0.90	3.38	5
0.94	3.87	9	1.03	3.38	6
1.14	2.87	10	1.06	4.02	8
0.96	3.82	11	0.90	3.90	12
1.35	3.04	13	1.01	3.30	17
1.11	3.12	14	0.79	3.51	18
0.90	4.12	15	1.01	3.44	19
1.00	3.91	16	1.11	3.75	20
			1.03	4.08	21
			0.87	4.36	22
			0.90	4.06	23

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PSTE

PSTE

STOE

51.52

49.92

45.57

.4

47.9

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PSTE

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8.11	47.83	12		
7.52	44.67	30		
7.5	45.57	42		
4.66	52.52	44		
6.32	48.86	108		
6.11	49.92	152		
5.82	51.52	56		
6.73	47.95	138		
6.67	49.98	194		

(x)

PSTE

.(5)

PSTE

: 5

0.001 >	13.522	530.917	1	530.917	
0.005	7.988	313.652	1	313.652	
	.042	1.648	1	1.648	*
		39.264	190	7460.227	

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6 STOE

36.61

36.63

32.79

35.78

STOE

: 6

6.57	33.25	12		
4.61	32.60	30		
5.17	32.79	42		
2.97	37.55	44		
3.92	36.22	108		
3.71	36.61	152		
4.32	36.63	56		
4.332	35.43	138		
4.352	35.78	194		

.(7)

STOE

: 7

0.001 >	25.706	421.717	1	421.717	
	1.597	26.193	1	26.193	
	.186	3.049	1	3.049	*
		16.405	190	3117.026	

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(Bleicher & Lindgren,2005)

STOE

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STEBI-B

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.(2004)

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(1)124.

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.(2007)

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.(2007)

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-275	(1) 31		341
	:	.(2005)	.4
		www.amanjordan.org	
		.(2007)	.5
		.(2007)	.6
		.(2001)	.7
-491	"	" 2 (6)	.538
. 3	.	.(2007)	.8
		(www.mohe.gov.ps)	
		.(2005)	.9
	.(27)		
		http://www.gesten.org	
		:	:

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5 = 4 = 3 = 2 = 1 =

5	4	3	2	1						1
5	4	3	2	1						2
5	4	3	2	1						3
5	4	3	2	1						4
5	4	3	2	1						5
5	4	3	2	1						6
5	4	3	2	1						7
5	4	3	2	1						8
5	4	3	2	1						9
5	4	3	2	1						10

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5 4 3 2 1	13
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5 4 3 2 1	20
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5 4 3 2 1	22
5 4 3 2 1	23