



**2004/1/27**

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11				<b>4:1</b>
12				<b>5:1</b>
14				<b>6:1</b>
15				<b>7:1</b>
16	.....		:	
17				<b>1:2</b>
18				1:1:2
19				2:1:2
19				3:1:2
20				4:1:2
22				5:1:2

23		6:1:2
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24		7:1:2
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25		9:1:2
26		10:1:2
28		<b>2:2</b>
28		1:2:2
29		2:2:2
35		3:2:2
38		4:2:2
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43		7:2:2
44		8:2:2
45		9:2:2
47		10 :2:2
47		11:2:2
48		<b>3:2</b>
48	-	1:3:2
49		2:3:2
50		3:3:2
52		4:3:2
53		5:3:2
55		6:3:2
57		7:3:2
58		8:3:2

61	.....	:	
62			<b>1:3</b>
68			<b>2:3</b>
71			<b>3:3</b>
75			<b>4:3</b>
78			<b>5:3</b>
81			<b>6:3</b>
87	.....	:	
88			<b>1:4</b>
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91			<b>4:4</b>
91			1:4:4
91			1:1:4:4
92			2:1:4:4
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93			4:1:4:4
94			2:4:4
94			1:2:4:4
95			2:2:4:4
95			3:2:4:4
95			1:3:2:4:4

96		2:3:2:4:4
96		3:4:4
96		1:3:4:4
96		2:3:4:4
97		3:3:4:4
97		1:3:3:4:4
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100		4:4:4
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102		2:4:4:4
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103		<b>5:4</b>
106		<b>6:4</b>
106		<b>7:4</b>
108	.....	:
109		<b>1:5</b>
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109		1:1:1:5
111		2:1:1:5
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114		2:1:5
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115		1:1:2:1:5

115		1:1:1:2:1:5
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117		2:1:1:2:1:5
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120		4:1:1:2:1:5
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124		7:1:1:2:1:5
126		8:1:1:2:1:5
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127		9:1:1:2:1:5
129		2:2:1:5
129		1:2:2:1:5
130		2:1:2:2:1:5
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149		3:2:3:2:1:5
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156	8:2:3:2:1:5
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<b>176</b>	<b>4:5</b>
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<b>177</b>	2:3:4:5
<b>178</b>	4:3:4:5
<b>179</b>	
<b>191</b>	

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<b>162</b>	" "	<b>41</b>
<b>164</b>	" "	<b>42</b>
<b>165</b>	" "	<b>43</b>
<b>165</b>	" "	<b>44</b>

<b>167</b>	(2*2)	<b>45</b>
<b>168</b>	" "	<b>46</b>
<b>170</b>	" "	<b>47</b>
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<b>173</b>	" "	<b>49</b>

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# الفصل الأول

## مشكلة الدراسة: خلفيتها وأهميتها

1 :1

2 :1

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5 :1

6 :1

7 :1

## الفصل الأول

### مشكلة الدراسة: خلفيتها وأهميتها

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(7 1999 ) ...

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(8 1999 ).



.(1989 :37 )

.(1996 :152 )

(1978 :42 ) .

(30 :1999 )

.(199 )

(Educational Resources Information Cente) (ERIC)

(2001)

.(arzano, 1989)

(Ennis,1985, p:54)

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(17 1982 )

.(Moore 1985)

(83 1986)

(Sternberg,1986) "

(1972)

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(1960)

(1995 )

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(Affective Domain)

Cognitive (Domain)

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**7 :1**

## **الفصل الثاني**

### **الأدب النظري**

1 :2

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1 :2

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" (Debono )

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(4 1999 ).

(10 1999 ).

: **1 :1 :2**

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Barell, )

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(Metacognition )

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: **2 :1 :2**

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.(1991 )

: **3 :1 :2**

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(Maclure ) ."

.(1999 )

1993

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1998

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**4 :1 :2**

Cognitive operations

:

Met cognitive Operations

.(Lipman , 1991 ) "

## Language and Symbol Manipulation

(Caillot , 1991 )

## Heuristic-Oriented Learning

.(1995 ) "Cort "

## Formal Thinking

Piaget

.(1999 ) :

Osborn's Creative Problem Solving	.1
Taba's Thinking Skills	.2
Guilford's Structure of Intellect (Sol)	.3
DeBono's Cognitive Research Trust (CORT)	.4
Lpiman's Philosophy for Children	.5

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5 :1 :2

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:(1994 )

(98 1999 )

(Inductive )

( Critical )

(Effective thinking)

(Cognitive)

(Reflective)

.(Analytical)

(Creative)

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(1992 ) (1988 )

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(1986)

1986 )

.(DEBONO

: **8 :1 :2**

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.(DEBONO

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.(Nicker, 1985 )

**9 :1 :2**

: (1999 ):

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(8)

(21) ( Marzano 1987)

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Teaching ) " " (Raths 1991 )

: (for Thinking

: (1999 )

.(Beyer 1987 )

**10 :1 :2**

(Beyer)

(1999 )  
(Tactics)

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(Goodlad 1984 )

(1930-1910 )

(Reflective thinking)

(Dewey)

(Inquiry)

(Glaser. 1961-1940)

(Ennis )

(1979- 1962)

– 1993) .(1992- 1980)

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.(1999 / ) .

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(1982 1985 )

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Critical

Kritikos Criticus

(DeBono, 1994)

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(1999 )

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.(1991 ) ( 1993 )

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(Dewey, 1982) "

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(Ennis)

(Paul, 1998 )

.(1999 )

(Paul, 1998) ( )

(Brookfield, 1987)

(reflection dimension)

(Brookfield, 1987)

(Sternberg, 1987)

(Blair)

(1972 )

(Fisher, 1988)

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Dis )

(Ennis, 1985)

: (positions

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(Inference)

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(Deduction)

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(Evaluation)

(Induction)

(Critique )

(Sutton, 1987)

(Criticism)

.(Norris, 1985)

:

.(Udall and Daniels, 1991)

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.(Polette, 1982)

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.(Lipman, 1991)

.(Norris, 1985)

.(Lipman, 1988)

: 3 :2 :2

(Ennis, 1988, P: 19 )

: (1982 )

(Kneedler, P: 276)

:

(Ennis, 1985)

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(Udall and Danies, 1991)

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**Inductive Thinking Skills :**

**1 :3 :2 :2**

(1988 )

Open- )

:

(Aaloglcal Reasoning)

(Ended

**: Deductive Thinking Skills**

**2 :3 :2 :2**

(Deductive Argument)

**: (Evaluative Thinking Skills)**

**3 :3 :2 :2**

" (Meeker, 1969)

Structure of

Guilford

(Meeker, 1969)

Intellect

Runco and )

(Feld husen, 1972 )

.(Smith , 1992

.(1999 )

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.(1988 )

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**4 :2 :2**

: (Elder and Paul , 1996)

**: Clarity .1**

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**: Accuracy .1**

" 65

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**: Precision .2**

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**: Relevance .3**

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**: Depth .4**

**: Breath .5**

**: Logic .6**

**5 :2 :2**

(Harnadek,1976)

: **6 : 2 : 2**

.(Norris , 1985)

.(McCarthy, 1992)

.(Paul,1984 1987 ).

(Smith,1977)

(1995)

(McPick,1981)

(Seigel,1984)

.(Norris,1985)

(Dialectical)

(Paul,1984)

.(Fisher, 1991) Crow,1989))

.(Paul 1984 ) (1993 )

.(199 ) (Brook field 1987 )

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7 : 2 :2

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) (How to become a person)

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(1999

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**8 :2 :2**

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(Ennis, 1989, McPeck, 1990)

(Norris, 1985 ) .

Swlart, )

(et. 1990

(Rebinson, 1987) .

.(Thayer-Bacon, 1991 )

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.(Presseisen, 1985) .

(Riesenmy, 1991 )

(Ennis, 1989)

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9 :2 :2

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(1999,79 )

.(Davis. 1989) .MatthewLipman .1

(Instrumental Enrichment) .2

.(Banks, 1991) .(Reuven Feuerstein )

	(The Cognitive Research Trust) (Cort)	.3
(1994 )	(DeBone, 1991) .(Edward de Bono)	
	(Structure of Intellect)	.4
	.(Meeker, 1969) .(Mecker and Robert Mecker)	
Thinking storage Sense ) (SSCT)		.5
:	( Banks, 1991) .(Fluellen, 1994) .(Critical	
	(The Higher-Order Thinking Skills) (Hots)	.6
	.(Stanley Pogrow)	
	(Acurriculum for thinking) (Odyssy) :	.7
	.(David Perkins)	
	(Problem Solving and Comprehension)	.8
Arther Whimbey and Jack ) (		
	.(Kockheed	
	(Productive Thinking)	.9
S.Lee )	(Project Immpect)	.10
	.(Wincocur	
	(Strategic Reasoning)	.11
	.(John Glade)	
	(Tactics for Thinking)	.12
	.(Rober Marzano)	
		.13

: 10 :2 :2

Ross Test ) (Cornell Critical Thinking Test)

New Jersey ) (of Higher Cognitive Processes

The Ennis-Weir Critical ) ( ) (Test of Reasoning Skills

(Thinking Essay Test

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.(Norris and Ennis, 1989)

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11 :2 :2

(1984 - 1999 ):

Divergent	Convergent

Creative Break Through

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(1938 - 1971 )

: (1908)

.(1988 ) .

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**2 :3 :2**

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(motive)

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(Instinct)

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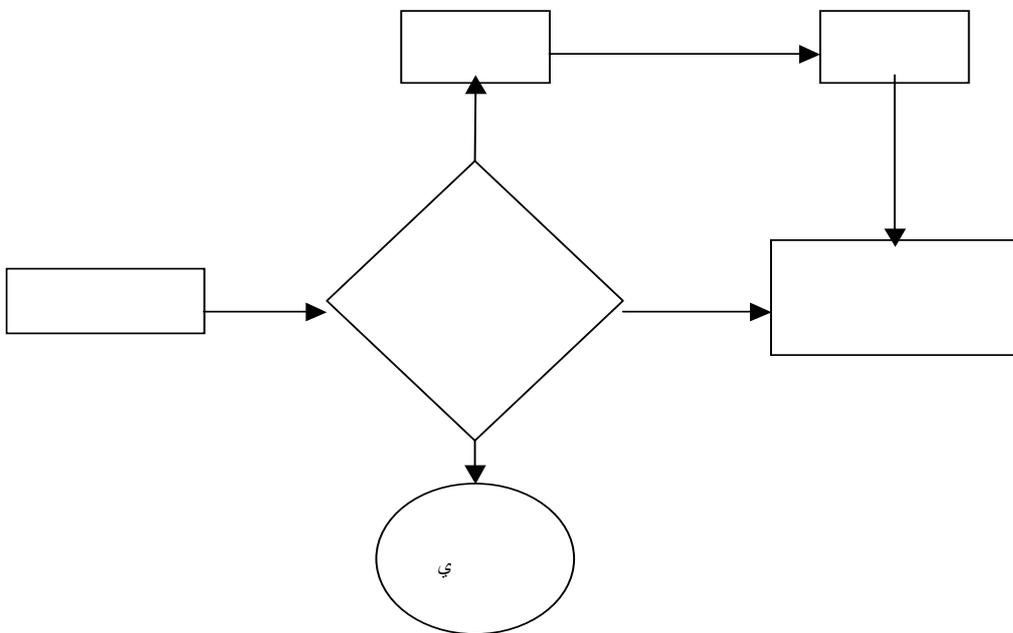
(1989 )

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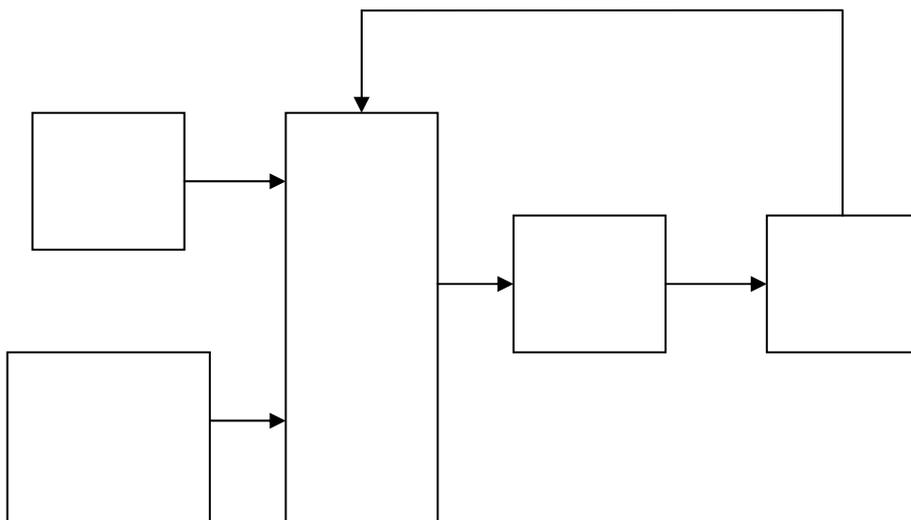
**!Error**



(1)

(incentive)

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(Maslow)

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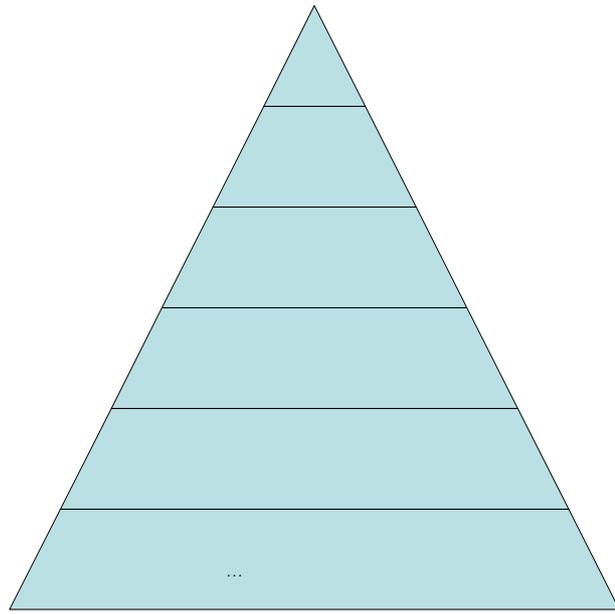
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: (Millet ) (Emmer) <

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(shock stimulus)

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.(1989 )

**( Achievement Motivation ( Components)) :**

**7 :3 :2**

(1996 )

(1991 )

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(Academic Aspiration)

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.(1984 ) .

: (Suuuccess)

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.(1995 )

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(Need for Achievement)

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.(1986 )

(Cognitive Drive) -

(Need affiliation) -

(1989 )

(1996 )

(Opportunism Tendency) :

:(Sentimental Stability) :

: **8 :3 :2**

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(1995 )

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:(Achievement Motivation)

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(Atkinson)

(The attribution of motivation )

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(1989 )

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(1995 )

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:(Competence Motivation)

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.(198 )

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(1998 ) .

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.(1997

## الفصل الثالث

### الدراسات السابقة

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( ERIC)

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**1 :3**

(Armstrong, 1970)

(100) (66)

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(inquiry)

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(Scarangelo, 1972)

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(Remy, 1976)

(247)

(Ray, 1979)

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(24)

(Norton, 1988)

(80)

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(Tarkington, 1989)  
(Paideia Seminars)

(Striler, 1990)

(Wright, 1988)

(Satler, 1987)

( Logo or Basic)

)1990)

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( M. Mcfarland)

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(1994)

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(ANCOVA) (2×2)

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**2 :3**

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(Mathias, 1973)

(737)

( Etheridge,1975)

(Value Orientation)

(Bennett, 1976)

(Hand field, 1980)

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(Watson-Glaser) /

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(Mines, 1980)

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(Foley, 1988)

(Monrael,1988)

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(Commeyras, 1990 )

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(Fischer, 1990)

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(Lockett, 1991)

(Schulhauser, 1991)

(West Wood, 1993)

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(136)

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( $\times 2 \times 2$ )

:

(  $0.05 = \alpha$  )

:

4 :3

(Pipes William, 1987)

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Total )

.(RS3)

(101)

(Battery

(187)

.( 0.05=  $\alpha$  )

(Edward and Bald ouf, 1987)

(120)

.( 80)

(Otis – lennon School Ability Test Intermediate Form R).( )

(Mayers Briggs)

(John Edwards, 1987)

(1994)

Edward De )

(Cort)

(1970)

(Bono

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"

( 0.05 =  $\alpha$  )

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(30)

(60)

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(30)

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(50)

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:

.(ANCOVA)

(0.01=  $\alpha$  )

-

(0.05 =  $\alpha$ )

(0.01 =  $\alpha$ )

(1996)

/

(ANOVA)

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( )

(0.01 =  $\alpha$ )

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Process-) -

.(Product Paradigm

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:

(Commeyras, 1990)

( )

(1991)

( 3- 1)

(38)

(38)

( )

(1995)

(Ennis)

(40)

(1994 – 1993)

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(%35.92 )

(Garris, 1974)

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(22)

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.( )

( Moreyra1992)

(47)

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**6 :3**

:

(Grewal and singha, 1989)

(1995 )

:

(377)

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-  
-  
-  
-

(1997 )

:

(0.01=  $\alpha$  )

-

(0.01=  $\alpha$  )

-

(79) (62) (141)  
(1998·1997)

:

(2000 )

"

"

:

(144)

( 0.01=  $\alpha$  )

(0.01=  $\alpha$  )

(0.01=  $\alpha$  )

-

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(0.01=  $\alpha$  )

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(2002)

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(176)

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(2003/2002)

(20)

:

(0.92)

:

(0.89)

(0.94)

(20)

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(0.84)

.(0.89)

( Hotelling T2)

(2 ×2 ×2 )

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(0.01)

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(2003 )

“ ”  
“ ”

(135)

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( $0.01=\alpha$ )

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## **الفصل الرابع**

### **الطريقة والإجراءات**

1:4

2:4

3:4

4:4

5:4

6:4

7:4

: **1:4**

: **2:4**

(19)	(44)			(2002/2001)
(75)			(5)	(20)
(6)	(35)	(34)		
)	(1226)	(2456)		
			(1)	(1230)

\* (1)

1139	34	19	
1170	35	20	
147	6	5	
2456	75	44	

. 2002/2001

/

\*

:

**3:4**

(141)

(4)

(25 :1998 )

:

32.75

(35)

(37 )

(35)

(34)

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(2)

(2)

70	2	35	1		35	1		
71	2	34	1		37	1		
141	4	69	2		72	2		

: 4:4

:

: 1:4:4

: 1:1:4:4

(2) (55)

(3)

(3)

(F)	(MSS)	(df)	(SS)	
5.8	262.31	1	262.31	(SSB)
	45.06	139	6263.96	(SSW)
		140	6526.27	(SST)

$6.63 = (140 - 1) \cdot 0.01 = \alpha$  \*

" " (5.8) " " (3)

( $\alpha = 01.$ )

(6.63)

: **2:1:4:4**

(60)

/

(1)

.(2) (55 )

: **3:1:4:4**

(285 :1999 ) (1-4 )

(1-4)

$$\%100 \times \frac{\tau \dot{N}}{N} =$$

:

:

:

- %2

( %80 - %15)

(%82

.(%90 - 10 )

(286 : 1999 ) (2-3 )

$$(2-4) \quad \% 100 \times \frac{(ن_د - ن_ع)}{ن} =$$

:

:

. %27

:

. %27

:

)

.(%65 - 0 )

(%61 - %18

.(%75 - %25

(4)

**4:1:4:4**

.(20)

(296 : 1999 ) ( Kuder-Richardson, Formulas No. 20)

$$(3-4) \quad \frac{ن ع - 2 س - (ن - س)}{ع (1 - ن)} =$$

:

2

:

: س -

.(61)

: 2:4:4

: 1:2:4:4

(4)

( 2)

(4)

1	1-1		
1	2-1		
1	1-2-1		
1	2-2-1		
1	1-2		
1	2-2		
1	3-2		
1	3-2		
1	4-2		
1	1-3		
1	2-3		
1	3-3		
1	3-3		
2			
15			

: **2:2:4:4**

/

(1)

( 2)

: **3:2:4:4**

.(233 1999 )

: **1:3:3:4:4**

: **2:3:3:4:4**

: **3:4:4**

: **1:3:4:4**

(29)

(9)

(12)

:

(90)

.(283: 1999 )

: **2:3:4:4**

(10)

(30)

(12)

/

(1)

(29)

(12)

(9)

( 2)

:

**3:3:4:4**

(141)

:

: (Test – retest)

**1:3:3:4:4**

(217: 1998 ) .

$$(4-4) \quad \left[ \frac{N \cdot s_{r_1}^2 - s_{r_2}^2}{s_{r_1}^2 - s_{r_2}^2} \right] \left[ \frac{s_{r_1}^2 - s_{r_2}^2}{s_{r_1}^2 - s_{r_2}^2} \right] =$$

(0.96 )

: 2:3:3:4:4

(20)

.(296 :1999 ( Kunder Richardson formulas No. (20))

(5-4) ..... 
$$\frac{n \bar{e} - n^2 \bar{s}}{n(n-1) \bar{e}} =$$

:  
2  
:  
س:

.(0.84)

: 4:3:4:4

(285 :1999 ) (1-4 )

%7 )

(%90- %7) (%85 -  
(%90-%10)

.(2-4)

-)

(%60 - %4) (%68- %3

( 1- 2) (%75 - %25)

(25 :1999 ) (6-4)

$$\%100 \times \frac{\bar{س}}{س ق} =$$

:  
—

(%78 - %5)

(%65 - %10)

35 33 30 22 19 18 15 7 : )

.(38 36

(100 )

(80)

: **4:4:4**

: **1:4:4:4**

:

.( 2 )

(2000 )

(69)

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(5)

(207)

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(5)

8		A
7		B
7		C
9		D
7		E
7		F
7		J
7		H
9		I

:

:

.

:

:

(6)

(6)

(F)	(MSS)	(Df)	(SS)	
4.98	689.48	1	689.48	(SSB)
	138.38	139	19234.14	(SSW)
		140	88182.14	(SST)

$$(6.63) = (140 - 1 - .01)$$

$$(4.98) \quad " \quad " \quad (6)$$

$$(6.63)$$

$$(0.01 = \alpha)$$

: **2:4:4:4**

/

: **3:4:4:3**

:

: **1:3:4:4:4**

.(.93)

: (Test –retest )

**2:3:4:4:3**

(4-4)

.(0.74)

: **5:4**

( 1999 ):

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.(200/2001)

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(2002/2001)

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(35)

(16)

(2002/5/28 – 4/26)

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.( 2002/5/29)

(2002/6/10)

.(2002/5/29)

: **6:4**

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**7:4**

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(2×2)

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(2×2)

•

(T-test)

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## **الفصل الخامس**

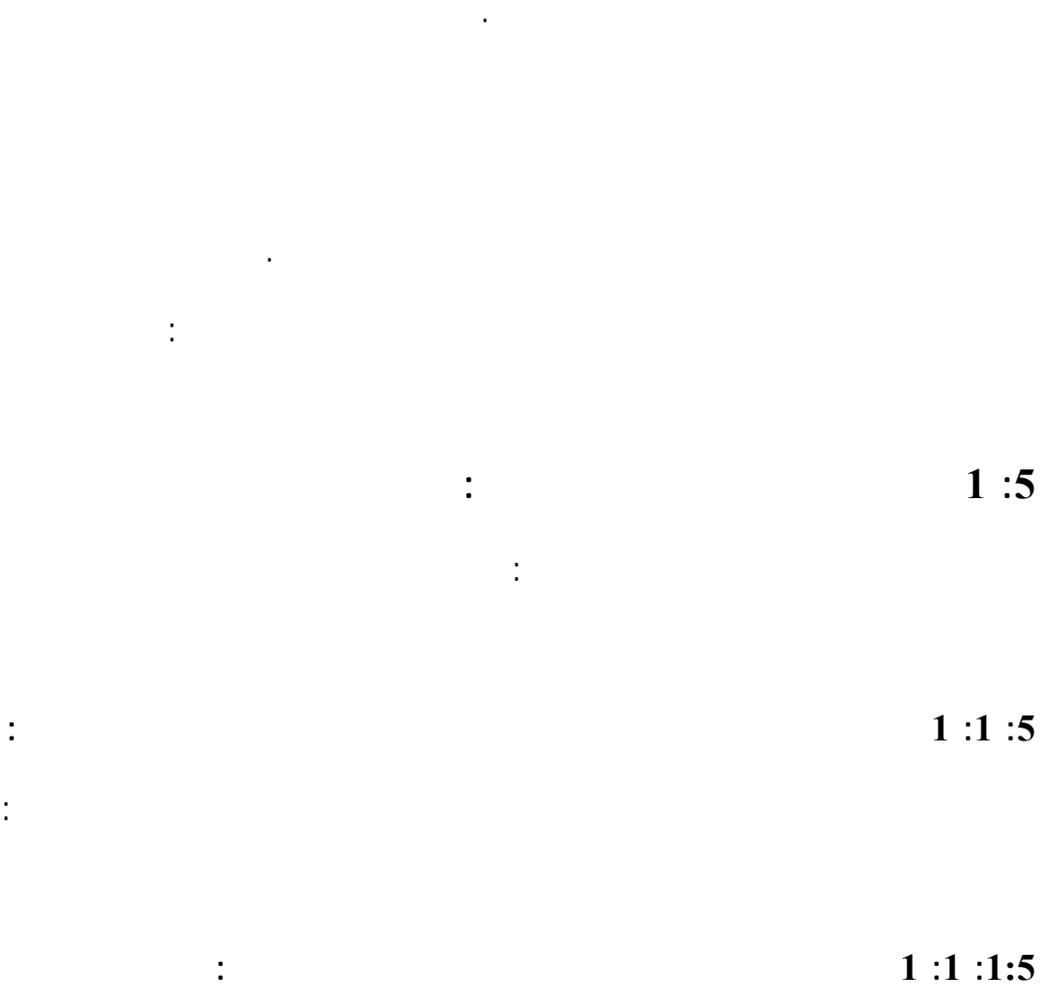
### **نتائج الدراسة ومناقشتها**

1 :5

2 :5

3 :5

4 :5

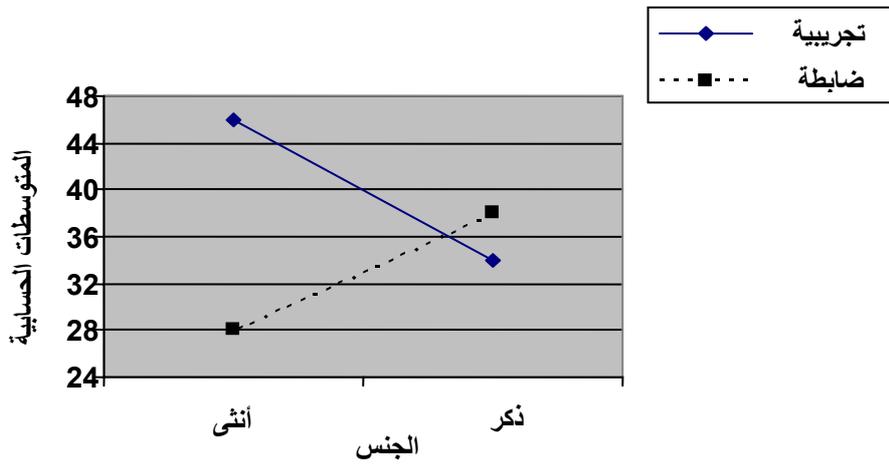


(7)

(7)

35.18	37.69		
12.8	8.07		
37	35		
46.6	28.43		
13.6	9.9		
34	35		

(4)



الشكل (4)  
المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على اختبار التحصيل العلمي الآتي

(4) (7)

( )

:

**2 : 1 : 1 : 5**

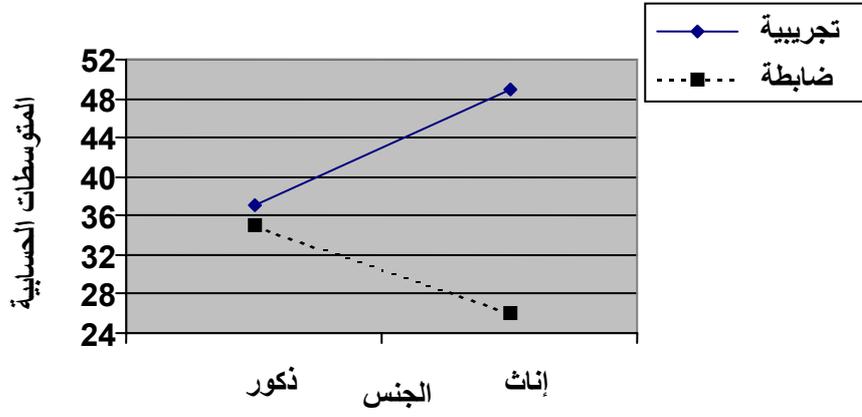
( )

(8)

(8)

36.3	35.83		
13.05	7.00		
37	35		
48.26	27.6		
14.03	8.2		
34	35		

(5)



الشكل (5)  
المتوسطات الحاسوبية لعلامات طلبة المجموعتين لضابطة  
والتجريبية على اختيار التحصيل العلمي المؤجل

(5)

(8)

( )

:

3 : 1 : 1 : 5

(9)

(9)

41.92	20.96	47.36	23.68		*
13.0	6.5	10.5	5.25		
71	71	70	70		
40.64		33.06			**
14.3		10.1			
71		70			
42.03		31.71			**
14.7		8.6			
71		70			

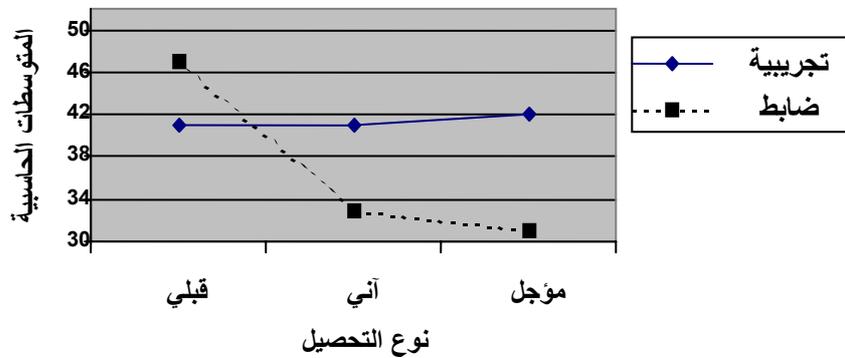
(80) (40)

\*

(80) ( )

\*\*

(6)



الشكل (6)

المتوسطات الحاسوبية لعلامات طلبة المجموعتين التجريبية والضابطة على اختبارات المعرفة القبليّة والتحصّل العلمي الأني والمؤجل

(6) (9)

: 2 :1 :5

:

: 1 :2 :1 :5

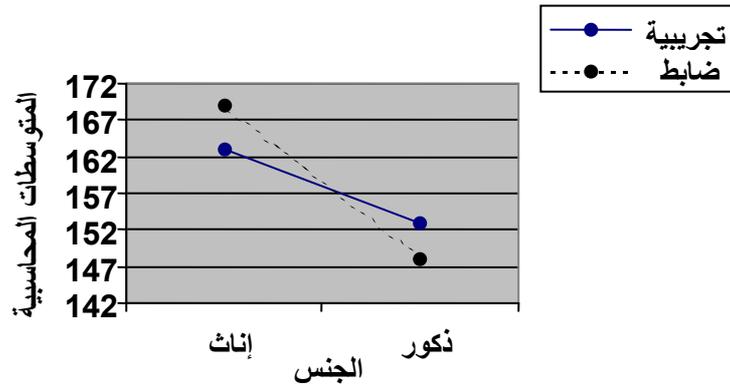
(10)

(10)

:

153.84	147.29		
15.39	13.8		
37	35		
163.09	169.49		
13.31	14.13		
34	35		

(7)



الشكل (7)  
المتوسطات الحاسوبية لعلامات طلبة المجموعتين  
الضابطة والتجريبية على فقرات مقياس دافع

(7)

(10)

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1 : 1 : 2 : 1 : 5

:

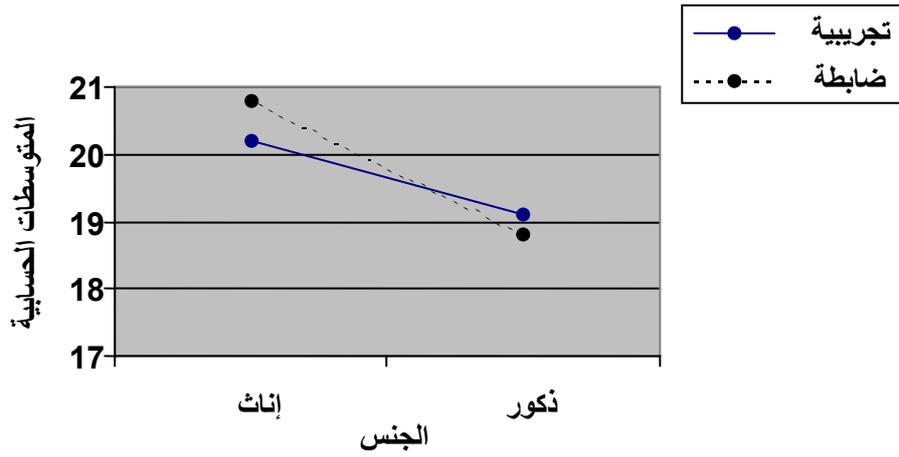
1 : 1 : 1 : 2 : 1 : 5

(11)

(11)

19.16	18.94		
2.63	2.24		
37	35		
20.45	20.83		
2.11	2.11		
34	35		

(8)



الشكل (8)  
المتوسطات الحاسوبية لعلامات طالبة المجموعتين الضابطة والتجريبية على مقياس دافع الإنجاز للطموح الأكاديمي الآني

(8) (11)

" "

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2 : 1 : 1 : 2 : 1 : 5

" "

" "

(12)

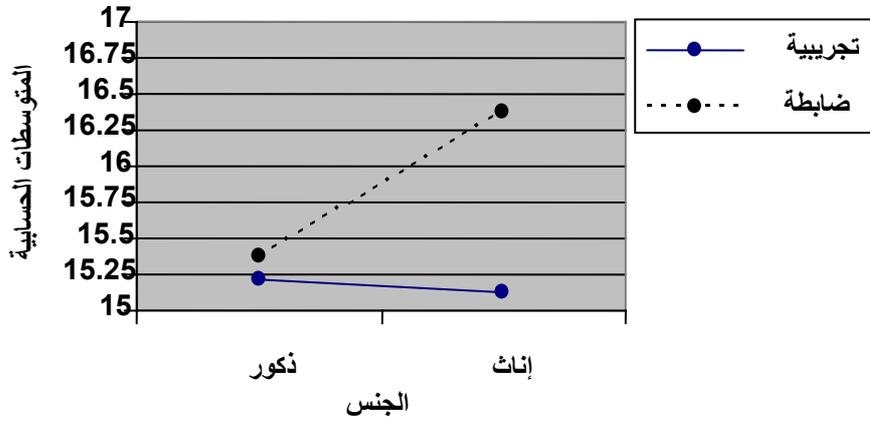
" "

(12)

" "

15.22	15.31		
2.16	3.36		
37	35		
15.09	16.37		
2.3	2.73		
34	35		

(9)



الشكل (9)  
المتوسطات الحاسوبية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس "نجاز التوجه الآني"

(9) (12)

(9)

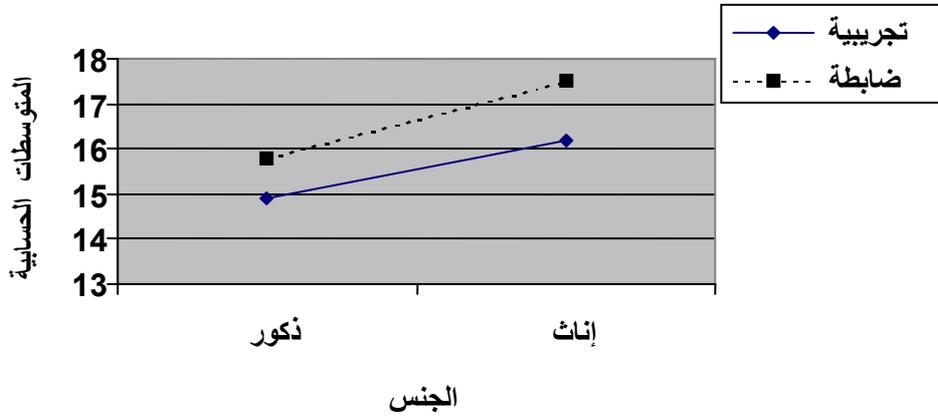
3 : 1 : 1 : 2 : 1 : 5

(13)

(13)

14.92	15.6		
2.25	2.42		
37	35		
16.41	17.46		
2.11	2.06		
34	35		

(10)



الشكل (10)  
المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز التوجه للعمل الآني"

(10)

(13)

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4 :1 :1 :2 :1 :5

"

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"

(14)

"

"

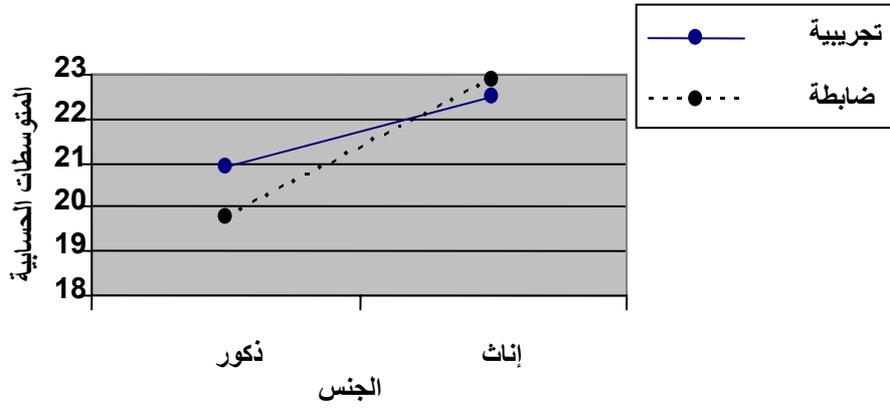
(14)

"

"

20.89	19.89		
3.44	2.74		
37	35		
22.53	22.83		
2.18	2.44		
34	35		

(11)



الشكل (11)  
المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية  
على فقرات مقياس دافع إنجاز الحاجة للتحصيل الآني

(11)

(14)

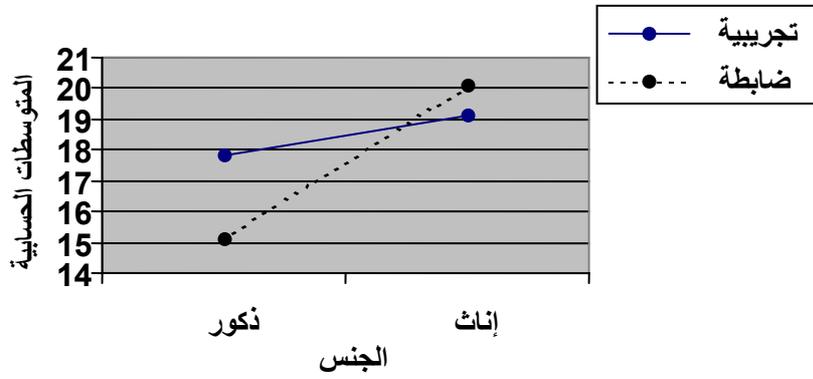
5 : 1 : 1 : 2 : 1 : 5

(15)

(15)

17.78	15.4		
3.38	2.2		
37	35		
19.29	20.4		
2.55	2.56		
34	35		

(12)



الشكل (12)  
المتوسطات الحاسوبية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز الحافز المعرفي" الأنبي

(12)

(15)

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**6 : 1 : 1 : 2 : 1 : 5**

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" "

(16)

"

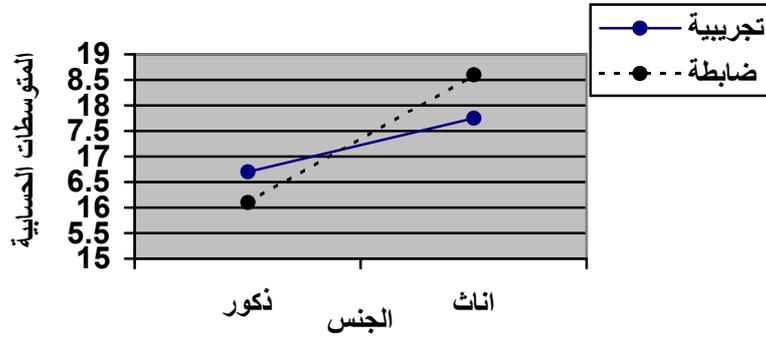
"

(16)

" "

16.35	16.09		
2.42	2.78		
37	35		
17.76	18.54		
2.56	1.99		
34	35		

(13)



الشكل (13)

المتوسطات الحاسوبية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "انجاز اعلاء الأنا" الآتي

(13)

(16)

( )

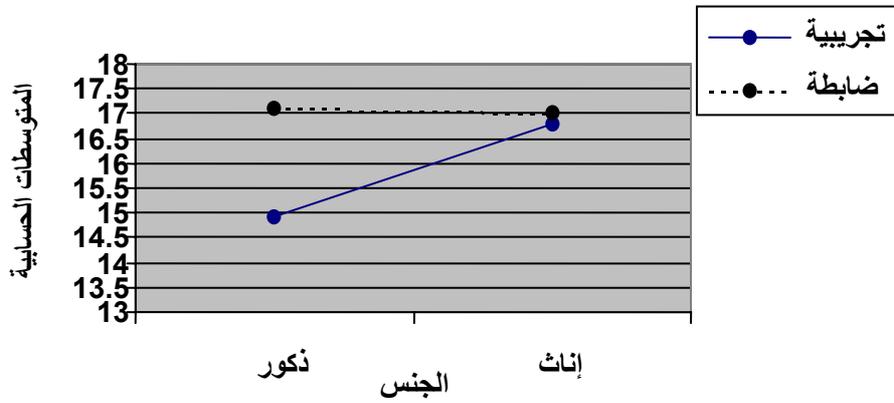
7 : 1 : 1 : 2 : 1 : 5

(17)

(17)

14.97	17.03		
2.11	2.2		
37	35		
16.91	17.03		
2.09	2.99		
34	35		

(14)



الشكل (14)

المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مياس دافع "إنجاز الحاجة للانتماء" الأني

(14)

(17)

8 :1 :1 :2 :1 :5

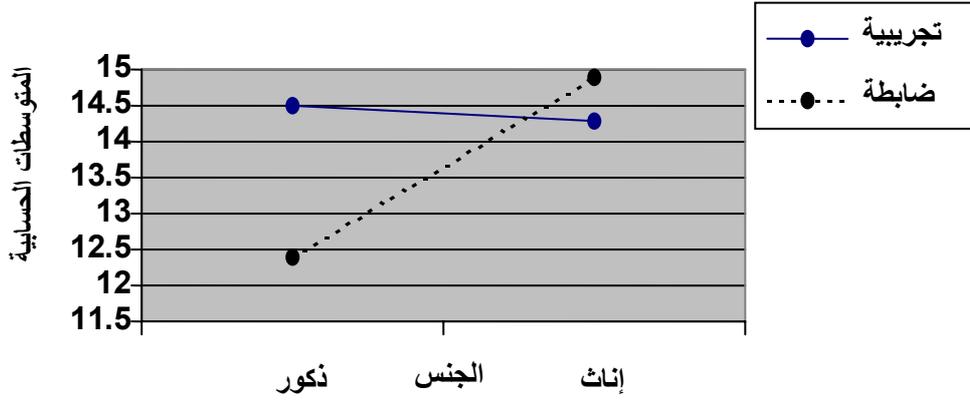
:

(18)

(18)

14.49	12.29		
2.51	3.14		
37	35		
14.32	15.2		
2.31	3.05		
34	35		

(15)



الشكل (15)  
المتوسطات الحاسوبية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز النزعة الوصلية الانتهازية" الآتي

:

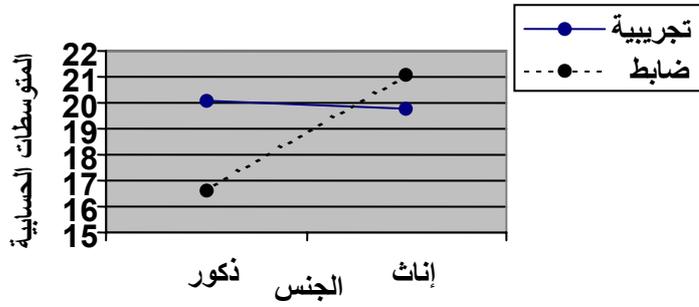
9 : 1 : 1 : 2 : 1 : 5

(19)

(19)

20.05	16.63		
3.05	3.34		
37	35		
19.83	21.09		
3.24	3.43		
34	35		

(16)



الشكل (16)  
المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس "إنجاز الاستقرار العاطفي" الأني

(16)

(19)

"

"

:

**2 :2 :1 :5**

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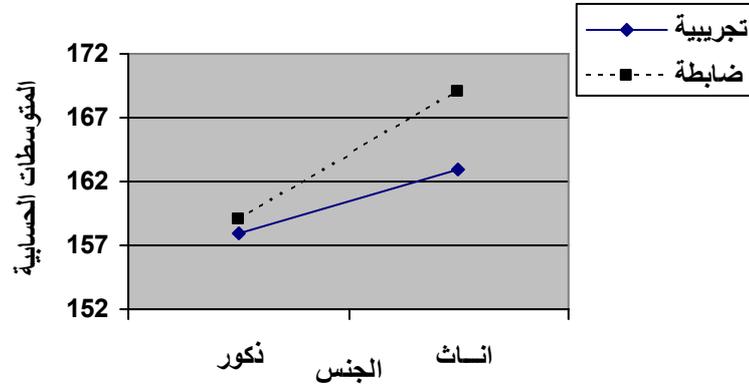
**1 :2 :2 :1 :5**

(20)

(20)

157.38	157.34		
15.46	10.91		
37	35		
162.79	169.8		
12.26	13.52		
34	35		

(17)



الشكل (١٧)

المتوسطات الحاسوبية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع الانجاز الموجل

(17)

(20)

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1 : 2 : 2 : 1 : 5

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1 : 1 : 2 : 2 : 1 : 5

:

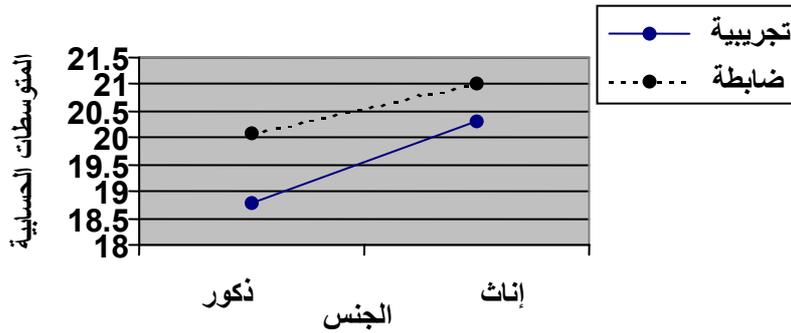
"

(21)

(21)

18.76	20.26		
3.18	1.85		
37	35		
20.41	20.97		
2.52	1.81		
34	35		

(18)



الشكل (18)

المتوسطات الحاسوبية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "الإجاز للطموح الأكاديمي" الموجل

(18) (21)

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2 : 1 : 2 : 2 : 1 : 5

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" "

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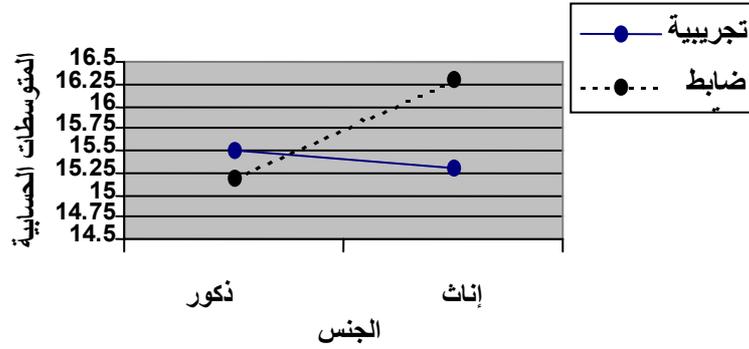
(29)

" "

(22)

15.49	15.11		
2.94	2.55		
37	35		
15.53	16.37		
2.7	2.66		
34	35		

(19)



الشكل (19)

المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز التوجه للنجاح" الموجل

(19)

(22)

3 : 1 : 2 : 2 : 1 : 5

:

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"

"

(23)

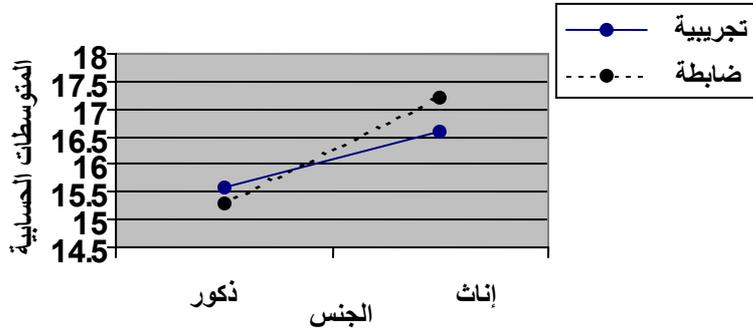
"

"

( 23 )

15.57	15.46		
2.24	2.16		
37	35		
16.62	17.11		
2.22	2.29		
34	35		

(20)



الشكل (20)  
المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز التوجه للعمل" الموجل

(20)

(23)

4 : 1 : 2 : 2 : 1 : 5

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(24)

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"

(21)

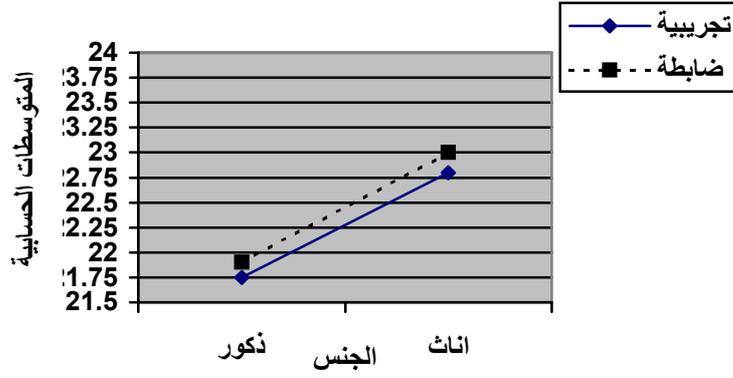
"

"

(24)

21.73	21.8		
3.2	2.86		
37	35		
22.91	23.09		
2.12	2.75		
34	35		

(21)



الشكل (21)

المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "انجاز الحاجة للتحويل" الموجل

(21)

(24)

5 : 1 : 2 : 2 : 1 : 5

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(25)

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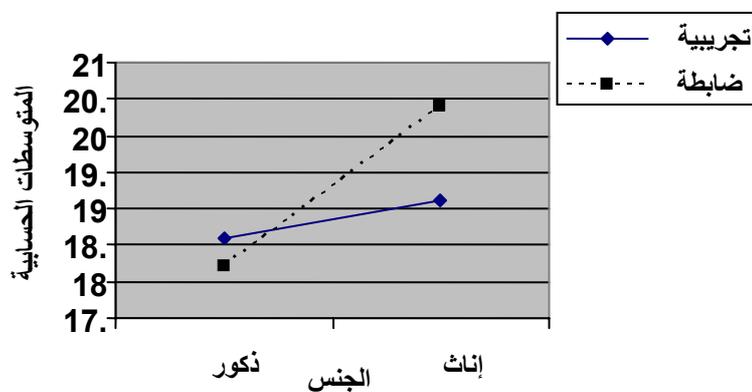
(25)

18.57	18.2		
2.63	2.77		
37	35		
19.18	20.54		
2.21	2.6		
34	35		

(22)

"

"



الشكل (22)

المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز الحافز المعرفي" الموجل

(22)

(25)

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6 :1 :2 :2 :1 :5

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(26)

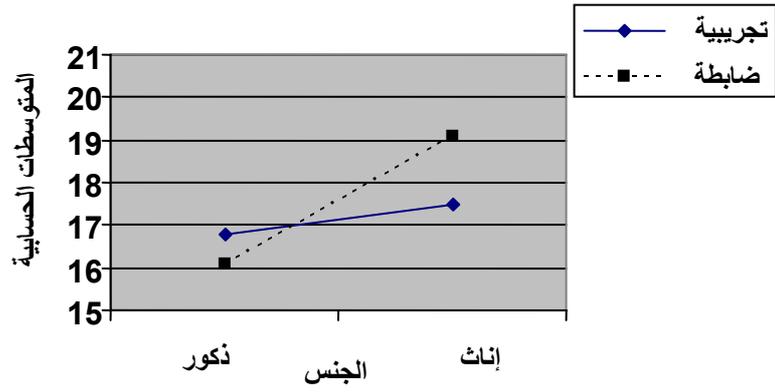
" "

(26)

16.76	16.26		
2.49	2.77		
37	35		
17.59	19.11		
2.45	2.26		
34	35		

(23)

" "



الشكل (23)

المتوسطات الحاسوبية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز إعلاء الأنا" الموجل

(23)

(26)

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7 : 1 : 2 : 2 : 1 : 5

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(27)

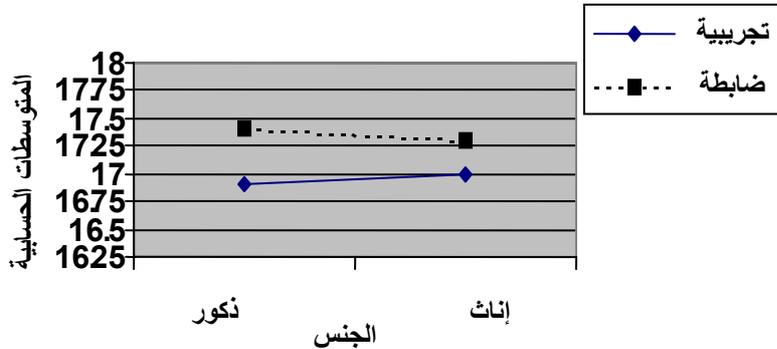
"

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(27)

16.86	17.31		
2.43	2.23		
37	35		
17	17.34		
1.91	2.13		
34	35		

(24)



الشكل (24)

المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز الحاجة للانتماء" المؤجل

(24)

(27)

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( )

"

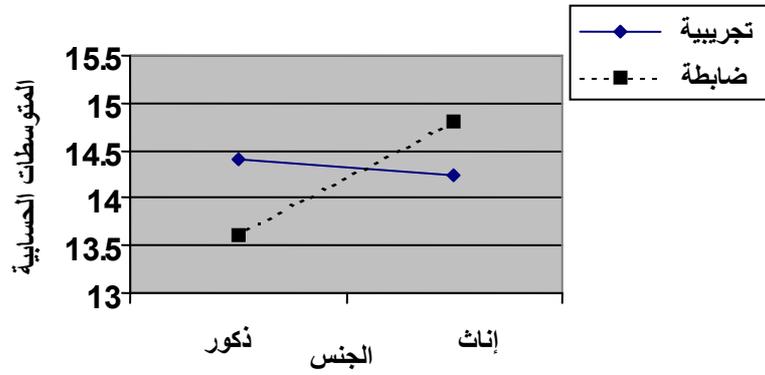
8 : 1 : 2 : 2 : 1 : 5

(28)

(28)

14.38	13.54		
3.44	3.27		
37	35		
14.29	14.77		
2.39	2.40		
34	35		

(25)



الشكل (25)

المتوسطات الحاسوبية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "إنجاز النزعة الوصولية الانتهازية" الموجل

(25)

(28)

9 : 1 : 2 : 2 : 1 : 5

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"

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(29)

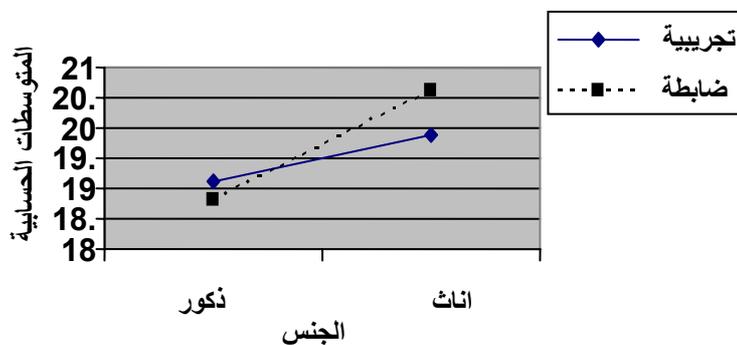
"

"

(29)

19.1	18.97		
3.65	3.6		
37	35		
20	20.66		
2.46	2.95		
34	35		

(26) (29)



الشكل (26)

المتوسطات الحسابية لعلامات طلبة المجموعتين الضابطة والتجريبية على فقرات مقياس دافع "أنجاز الاستقرار العاطفي" الموجل

(26) (29)

:

1 : 3 : 2 : 1 : 5

:

:

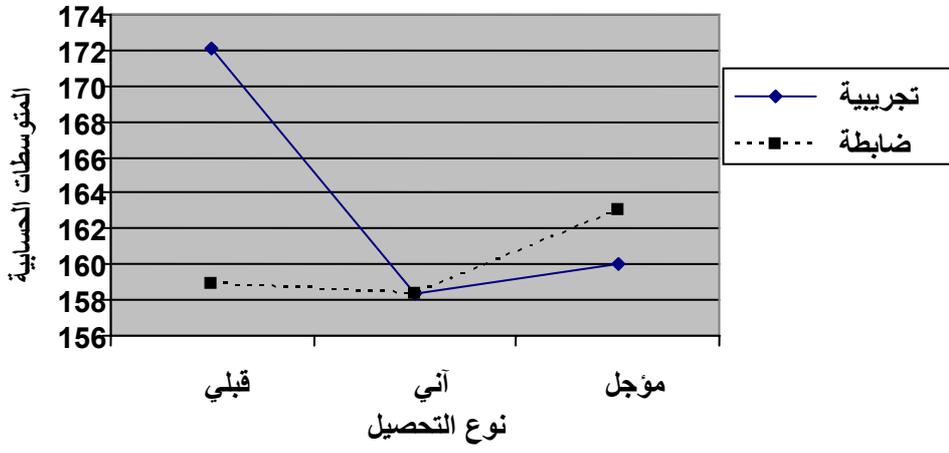
1 : 3 : 2 : 1 : 5

(30)

(30)

172.4	159.6		
15.9	13.5		
71	70		
158.3	158.4		
15.06	17.8		
71	70		
160	163.6		
14.2	13.7		
71	70		

(27)



الشكل (27)

المتوسطات الحسابية لعلامات طلبة المجموعتين التجريبية والضابطة  
على مقياس دافع "الإنتاج العام القبلي والآني والمؤجل"

(27)

(30)

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2 : 3 : 2 : 1 : 5

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1 : 2 : 3 : 2 : 1 : 5

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.(31)

"

"

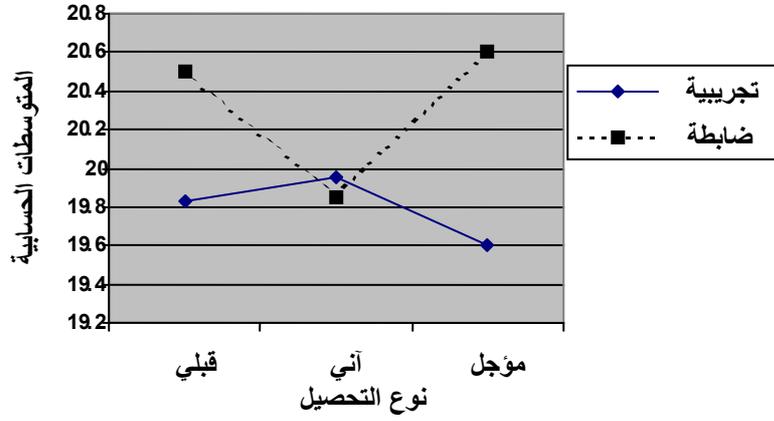
(31 )

"

"

19.85	20.53		
2.32	2.13		
71	70		
19.93	19.89		
2.5	2.36		
71	70		
19.6	2.06		
2.9	1.85		
71	70		

(28)



الشكل (28)

المتوسطات الحاسوبية لعلامات طلبة المجموعتين التجريبية والضابطة على مقياس دافع الإنجاز للطموح الأكاديمي القبلي والآني والمؤجل

(28)

(31)

2 : 2 : 3 : 2 : 1 : 5

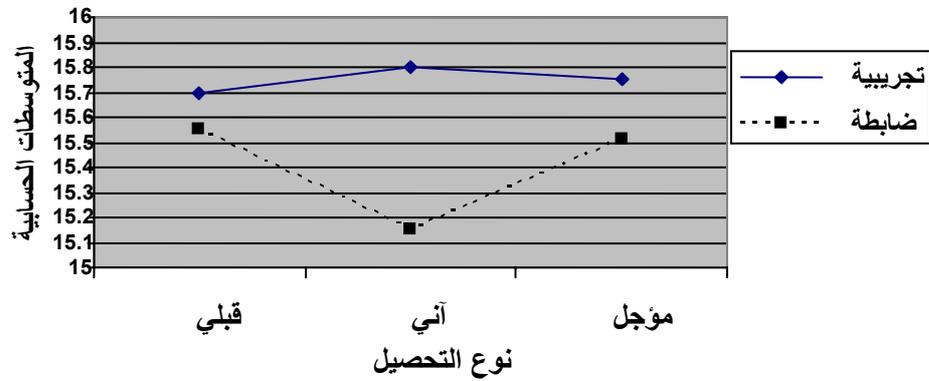
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(32).

(32)

15.54	15.7		
2.2	2.46		
71	70		
15.15	15.84		
2.22	3.08		
71	70		
15.51	15.74		
2.81	2.66		
71	70		

(29)



الشكل (29)

المتوسطات الحسابية لعلامات طلبة المجموعتين التجريبية والضابطة على مقياس دافع إنجاز التوجه للنجاح القبلي والاني والمؤجل

(29)

(32)

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3 :2 :3 :2 :1 :5

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.(33)

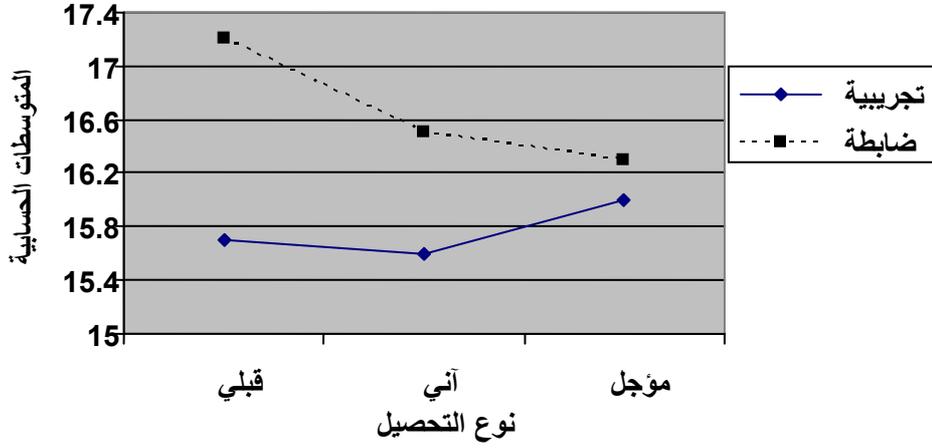
(33)

"

"

15.7	17.19		
2.33	1.96		
71	70		
15.63	16.53		
2.42	2.4		
71	70		
16.07	16.29		
2.28	2.36		
71	7070		

(30)



الشكل (30)

المتوسطات الحسابية لعلامات طلبة المجموعتين التجريبية والضابطة على مقياس دافع "إنجاز التوجه للعمل" القبلي والآني والمؤجل

(30)

(33)

4 : 2 : 3 : 2 : 1 : 5

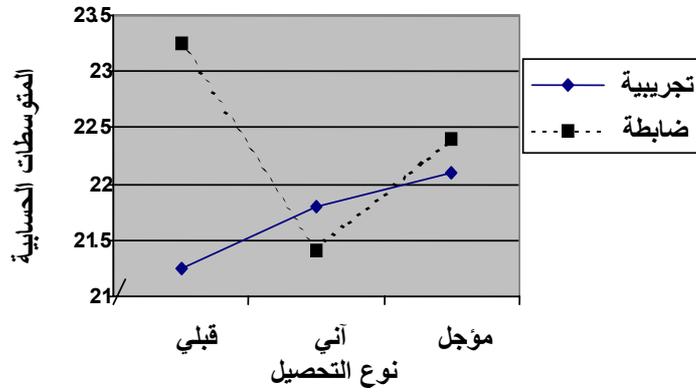
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(34).

(34)

21.24	23.19		
2.75	2.14		
71	70		
21.68	21.36		
2.99	2.97		
71	70		
22.29	22.44		
2.78	2.86		
71	70		

(31)



الشكل (31)  
المتوسطات الحسابية لعلامات طلبة المجموعتين التجريبية والضابطة على  
مقياس دافع "إنجاز الحاجة للتحصيل" القبلي والآني والمؤجل

(31) (34)

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5 :2 :3 :2 :1 :5

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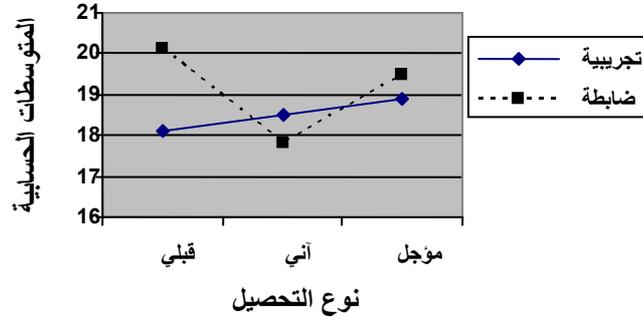
.(35)

(35)

" "

18.13	20.21		
2.81	1.79		
71	70		
18.51	17.9		
3.1	3.46		
71	70		
18.9	19.37		
2.44	2.92		
71	70		

(32)



الشكل (32)  
المتوسطات الحاسوبية لعلامات طلبة المجموعتين التجريبية والضابطة على  
مقياس دافع "إنجاز حافز المعرفي" القبلي والاني والمؤجل

(32)

(35)

6 : 2 : 3 : 2 : 1 : 5

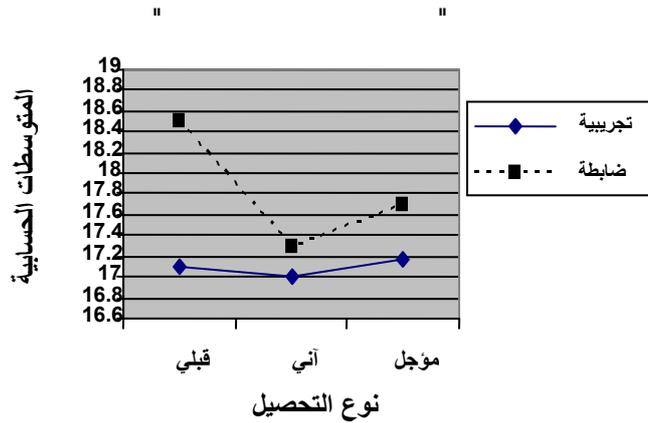
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(36).

(36)

17.1	18.49		
2.29	1.96		
71	70		
17.03	17.3		
2.57	2.7		
71	70		
17.15	17.69		
2.49	2.87		
71	70		

(33)



الشكل (33)

المتوسطات الحسابية لعلامات طلبة المجموعتين التجريبية والضابطة على مقياس دافع "إنجاز إعلاء الأنا" القبلي والآني والمؤجل

(33)

(36)

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"

7 : 2 : 3 : 2 : 1 : 5

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.(37)

(37)

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16	17.29		
2.59	2.05		
71	70		
15.9	17.03		
2.31	2.61		
71	70		
16.93	17.33		
2.18	2.17		
71	70		

(34)

" " "

(34) (37)

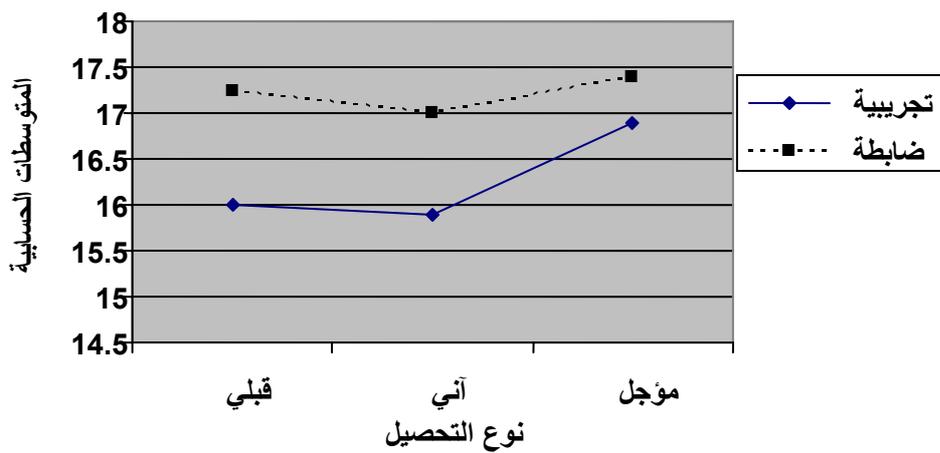
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8 : 2 : 3 : 2 : 1 : 5

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(38)



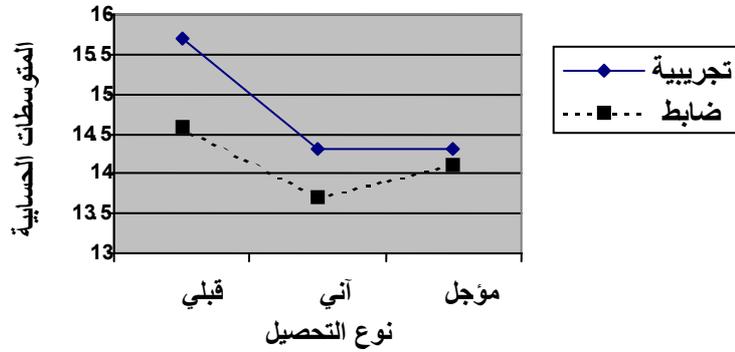
الشكل (34)

المتوسطات الحسابية لعلامات طلبة المجموعتين التجريبية والضابطة  
على مقياس دافع "إنجاز الحاجة للإتناء" القبلي والآني والمؤجل

(38)

15.3	14.69		
2.32	2.06		
71	70		
14.41	13.74		
4.13	3.41		
71	70		
14.34	14.16		
2.97	2.91		
71	70		

(35)



الشكل (35)

المتوسطات الحسابية لعلامات طلبة المجموعتين التجريبية والضابطة على مقياس دافع "إنجاز النزعة الوصلية الأنتهازية" القبلي والآني والمؤجل

(35) (38)

9 : 2 : 3 : 2 : 1 : 5

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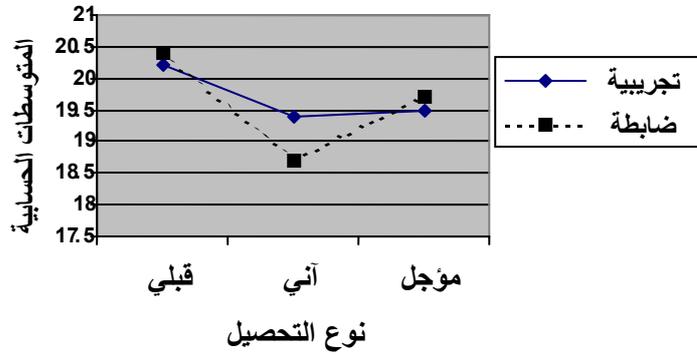
.(39)

(39)

20.23	20.73		
2.68	2.56		
71	70		
19.94	18.86		
3.12	4.04		
71	70		
19.54	19.81		
3.15	3.38		
71	70		

(36)

"



الشكل (36)

المتوسطات الحسابية لعلامات طلبة المجموعتين التجريبية والضابطة على مقياس دافع "إنجاز الاستقرار العاطفي" القبلي والآني والموجل

(36)

(39)

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1 :2 :5

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(0.01= $\alpha$ )

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		df		
*15.8	2027.16	1	2027.16	/
.26	33.88	1	33.88	/
*29.4	3773.5	1	3773.5	×
	128.37	137	17586.95	
		140	23421.43	

$$6.63 = (.01 \ 137 \ 1) \quad ) \quad (0.01=\alpha )$$

(40)

(.01=α )

(15.8) " " ( )

(6.63)

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(41)

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(41)

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" "	" "					
2.33	3.64	139	0.011	33.06	70	
			14.3	40.64	71	

(2.33)

(3.64)

" "

(41)

(.01= $\alpha$ )

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(Commeyras, 1990)

(Moreyra , 1992)

(Garris, 1974)

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(40)

(.01=α)

(6.63)

(.26)

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(.01=α)

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(42)

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2.33	3.63	69	12.7	35.18	37	
			13.7	46.6	34	

(40)

(Hand field, 1980) :

Wright, )

(1988

(1991)

(1993)

(Mines, 1980)

(40)

(6.63)

(29.4)

(T-test) " "

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(43)

(43)

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" "	" "					
2.33	3.4	70	14.3	40.64	71	
			14.7	42.03	71	

.(0.01 =  $\alpha$ )

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(0.01 =  $\alpha$ )

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(44)

(44)

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" "	" "					
2.33	3.47-	69	0.011	33.06	70	
			8.63	31.71	70	

(0.01 =  $\alpha$ )

" " (44)

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**2 :2 :5**

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(0.01 =  $\alpha$ )

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(.01=  $\alpha$ )

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(.01=  $\alpha$ )

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.(45)

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.002	47.	1	47.	( )
*43	8663.4	1	8663.4	( )
*7.3	1477.6	1	1477.6	( × )
	201.5	137	27609.5	
		140	37751	

.6.63 =(.01 137\*1)

" " (.01= $\alpha$ )

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(46)

(46)

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.11	2.36	19.89	70		
	2.5	19.93	71		
1.5	3.08	15.84	70		
	2.22	15.15	71		
2.22	2.4	16.53	70		
	2.42	15.63	71		
.63	2.97	21.36	70		
	2.99	21.68	71		
1.1	3.46	17.9	70		
	3.09	18.51	71		
0.64	2.7	17.31	70		
	2.57	17.03	71		
*2.72	2.61	17.03	70		
	2.31	15.9	71		
1.34	3.41	13.74	70		
	4.13	14.41	71		
1.79	4.04	18.86	70		
	3.12	19.94	71		
0.04	17.8	158.4	70		
	15.06	158.3	71		

: (45:46)

(.01= $\alpha$ )

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.(2.36)

(.04)

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(2.72)

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.(2.36) (.01= $\alpha$ )

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.(01= $\alpha$ )

(.01=  $\alpha$ )

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.(2.36)

.(200 )

.(1995 )

(Brown, 1998)

.(Hynd, 1998 )

(45)

(.01 =  $\alpha$ )

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(47)

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(47)

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" "					
*2.7	15.39	153.8	37		
	13.3	163.1	34		
*2.3	2.6	19.2	37		
	2.11	20.4	34		
.23	2.13	15.22	37		
	2.28	15.09	34		
*2.71	2.25	14.92	37		
	2.11	16.41	34		
*2.38	3.44	20.89	37		
	2.18	22.53	34		
2.11	3.38	17.78	37		
	2.55	19.29	34		
*2.4	2.42	16.35	37		
	2.56	17.76	34		
*3.9	2.11	14.97	37		
	2.1	16.91	34		
.28	2.51	14.49	37		
	2.31	14.32	34		
.31	3.05	20.1	37		
	3.24	19.85	34		

(47)

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(.01= $\alpha$ )

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(.01= $\alpha$ )

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(.01= $\alpha$ )

(6.63)

(T-test) " "

(T-test) " " (48)

(48)

(T-test) " "

" "						
2.36	1.57	70	15.06	158.3	71	
			14.2	160	71	

(36)

(2.36)

(1.57)

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(T- test) " " (48)

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( T-test) " "

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2.36	3.36	69	17.8	158.4	70	
			13.7	163.6	70	

(49)

.(2.36)

(3.36)

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## المراجع

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## ملحق 2

### أدوات الدراسة

ملحق 2أ اختبار المعرفة القبليّة

ملحق 2ب نموذج الإجابة لأختبار المعرفة القبليّة

ملحق 2ت الخطة الزمنية لتدريس وحدة الحرارة في حياتنا

ملحق 2ث المواقف التعليميّة باستخدام طريقة التعليم الناقد

ملحق 2ج تحليل المحتوى التعليمي لوحدة الحرارة في حياتنا

ملحق 2ح اختبار التحصيل العلمي

ملحق 2خ نموذج الإجابة لاختبار التحصيل العلمي

ملحق 2د مقياس الدافع

ملحق 2ذ نموذج الإجابة لمقياس الدافع

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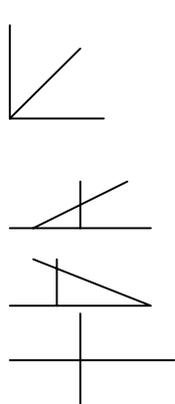
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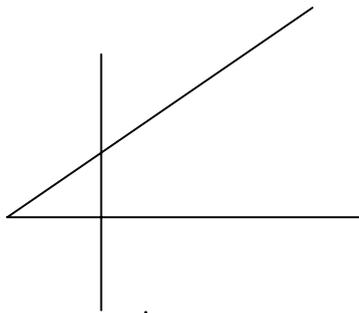
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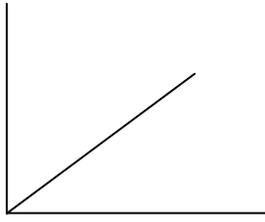
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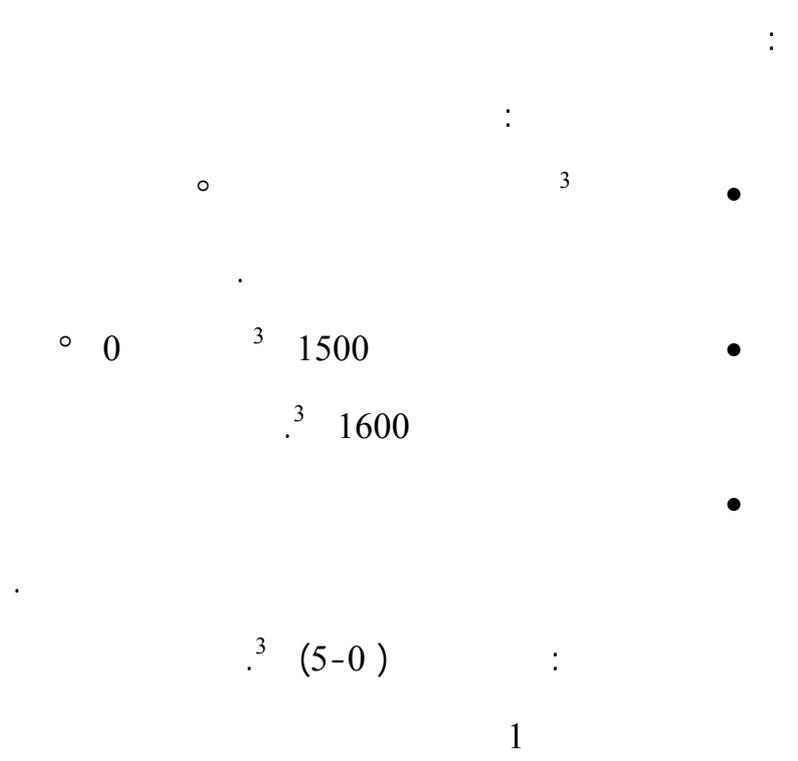
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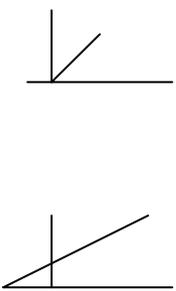




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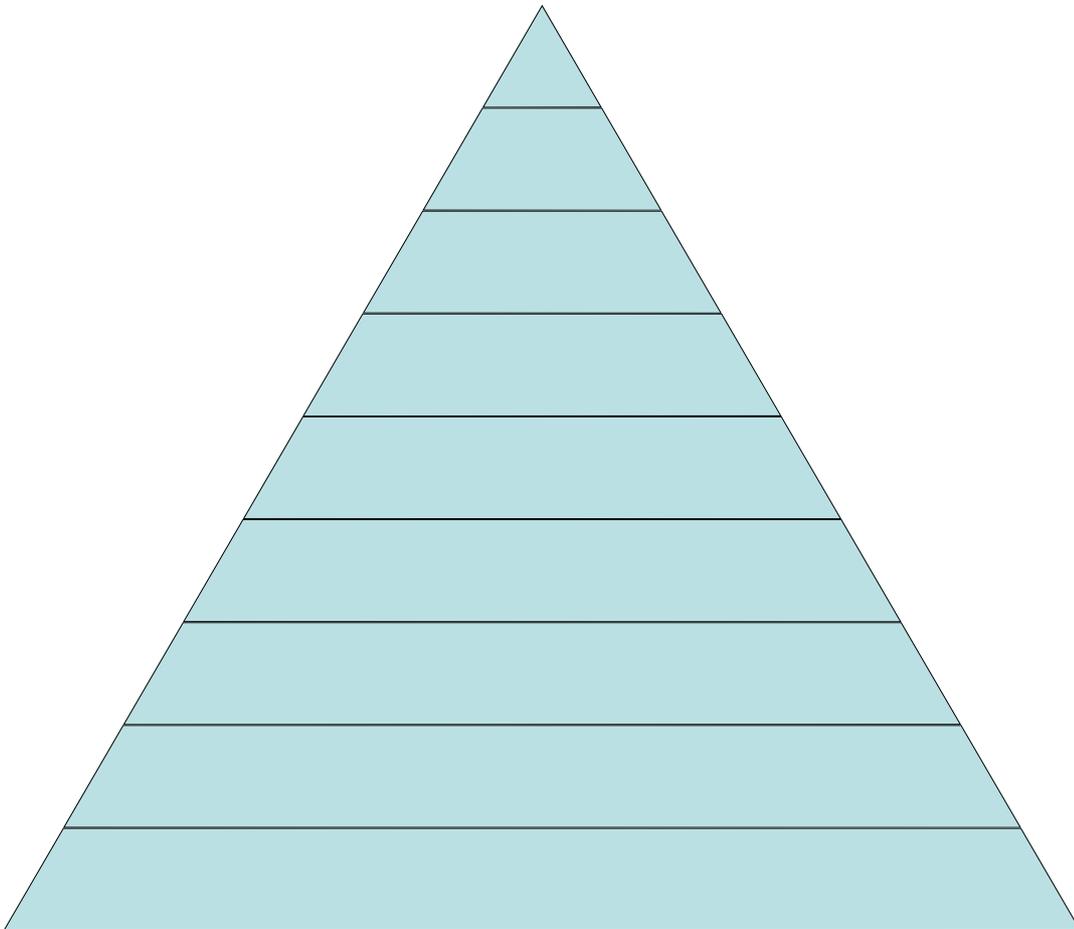
<b>%10</b>	<b>%10</b>	<b>%20</b>	<b>% 13</b>	<b>% 23</b>	<b>%24</b>	
1	1	1	1	1	1	% 10
1	1	2	1	2	2	% 15
1	1	2	1	2	2	% 15
1	1	2	1	2	2	% 16
1	1	2	1	2	2	% 20
1	1	1	1	1	1	% 10
1	1	1	1	2	2	% 14

40 =

. 50 =

□

\*



(29 1999 )\*

( 2 )

( 2)

-

x				16		x			1
			x	17				x	2
			x	18		x			3
	x			19				x	4
x				20			x		5
	x			21	X				6
x				22			X		7
	x			23				x	8
			x	24		x			9
		x		25			x		10
x				26	X				11
			x	27				x	12
	x			28		x			13
	x			29	X				14
							x		15

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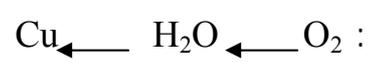
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: 1

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:3

2= : 4

$$\frac{\Delta \text{س}}{\Delta \times \text{س}} = \quad = \quad 2 \quad 1=1$$

$$\Delta + 1 = 2$$

$$2 \quad 1 = 1 \times 1 = 1$$

$$2(\Delta + 1) = \quad 2$$

$$2(\Delta) + \Delta \times 2 = 1 - 2(\Delta + 1) = 1 - 2 = \Delta$$

$$2(\Delta) + \Delta \times 2 = \frac{\Delta \text{س}}{\Delta \times 1} =$$

$$0 = {}^2(\Delta)$$

$\Delta$

$$2 =$$

$$27 \quad / \quad 10 \quad : 5$$

$$123- \quad / \quad 20$$

$${}_2 / {}_1 = {}_2 / {}_1 \quad ( / = ) ( \quad ) .$$

:6

$$2 = {}_2 : 7$$

$$45 = \Delta$$

$$/ {}^4 - 10 \times 6.8 =$$

$$\Delta \times {}_1 / ({}_1 - {}_2) =$$

$$45 \times {}_1 / {}_1 - 2 = / {}^4 - 10 \times 6.8 =$$

$${}_1 - 2 = 0.0306 \times {}_1 =$$

$$1.941 = {}_1 =$$

: 8

: 9

: 10

: 11

: 12

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: (3)

3

3

3

3

3

3

: (3)

1-3

2-3

3-3

4-3

ملحق (3 ب) : نماذج من اجابات الطلبة على اختبار التحصيل الفوري

1- 3

2- 3

3- 3

2 4- 3

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. : 1- 3

. : 2- 3

. : 3- 3

. : 4- 3

**:( 3)**

1- 3

2- 3

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4- 3

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1- 3

2- 3

3- 3

4- 3

: ( 3)

1- 3

2- 3

3- 3

4 - 3

(4)

%	%		%	%	
3	26	*29	8	2	*1
29	40	30	26	10	2
50	35	31	53	45	3
29	20	32	50	37	4
71	41	33	39	31	5
47	59	34	61	41	6
26	67	35	45	55	7
30	78	*36	26	55	8
37	21	37	16	61	*9
37	71	38	11	8	*10
37	34	39	29	70	11
32	64	40	32	14	12
21	74	*41	47	46	13
47	32	42	42	81	14
16	57	*43	16	35	15
13	82	*44	26	15	16
26	24	45	29	31	17
80	4	*46	53	30	18
32	51	47	55	50	19
58	35	48	26	17	20
34	70	49	32	58	21
29	77	50	30	80	*22
32	76	51	26	81	23
18	65	52	71	35	24
26	26	53	47	41	25
16	63	*54	34	54	26
11	38	*55	26	26	27
			18	49	28

\*

( 4 )

(%)	(%)	
0	43	1
65	55	2
45	24	3
47	39	4
36	62	5
32	52	6
43	70	7
4	32	8
6	48	9
54	61	10
26	30	11
62	36	12
29	34	13
65	15	14
20	65	15
32	61	16
39	33	17
32	17	18
28	16	19
32	24	20
42	50	21
0	80	22
32	69	23
53	66	24
41	50	25
37	35	26
40	73	27
9	36	28
35	57	29
3	62	30
33	52	31
40	30	32
12	20	33
26	42	34
32	72	35
6	71	36
54	45	37
0	15	38
54	35	39
29	30	40
43	34	41
37	16	42
5	21	43
0	33	44
33	19	45
2	49	46
39	25	47
3	40	48
53	47	49
42	17	50
28	30	51
1	54	52
41	35	53
59	60	54
3	45	55

(5)

%	%		%	%	
37	53	26	58	47	1
50	37	27	47	66	2
45	63	28	45	24	3
53	57	29	63	39	4
3	64	*30	32	69	5
34	52	31	34	56	6
39	33	32	5	77	*7
11	30	*33	63	38	8
26	42	34	45	48	9
5	78	*35	26	61	10
13	71	*36	26	40	11
45	49	37	42	36	12
3	5	*38	68	34	13
45	36	39	29	12	14
29	31	40	11	63	*15
34	38	41	39	61	16
37	16	42	29	31	17
39	11	43	18	7	*18
43	23	44	11	7	*19
34	19	45	42	14	20
29	39	46	34	51	21
39	28	47	18	85	*22
32	40	48	32	69	23
32	48	49	53	65	24
42	2737	50	42	51	25

\*

( 5 )

%	%	
60	77	1
59	60	2
51	52	3
24	32	4
33	22	5
27	25	6
33	7	7
54	19	8
52	21	9
43	54	10
33	68	11
59	71	12
60	62	13
43	41	14
15	9	15
35	69	16
37	28	17
10	15	18
55	9	19
60	40	20
60	48	21
14	35	22
41	43	23
32	33	24
43	52	25
51	49	26
60	31	27
50	44	28
26	78	29
60	90	30
55	76	31
32	33	32
10	35	33
24	41	34
29	25	35
45	33	36
42	8	37
44	7	38
29	19	39
39	20	40
19	44	41
34	32	42
45	23	43
53	18	44
50	16	45
37	51	46
31	33	47
29	31	48
4	23	49
27	24	50

: (6)

.	-6
.	- 6
.	-6
.	-6

(7)

80-	-80-	-40-	
75	73	39	1
73	70	37	2
71.5	68	30	3
67	66	30	4
66.5	61	32	5
56	58.5	30	6
58	55.5	30	7
54	56.6	34	8
66.5	64	31	9
57.5	54.5	28	10
56	51	25	11
58.5	50	24	12
46	46	26	13
44	42	22	14
44	43.5	25	15
45.5	42	25	16
43	40	21	17
50	54	21	18
46.5	49.5	23	19
43	45	19	20
58	56	20	21
53	49	20	22
39	34	17	23
46.5	42	18	24
31	36.5	19	25
38	38.5	15	26
38.5	33	14	27
37	34	16	28
37.5	35	17	29
31.5	35.5	14	30
28.5	27.5	13	31
32.5	30.5	14	32
19.5	15.5	12	33
29	27	11	34

( 7 )

67	65	36	1
65	63	31	2
60	62.5	32	3
58.5	53.5	22	4
52	50.5	25	5
49	50.5	25	6
52.5	48.5	26	7
49	47	24	8
35	37.5	24	9
44.5	38.5	23	10
39	37.5	24	11
40	40	24	12
40.5	38	22	13
37	35.5	23	14
33.5	35	22	15
30	34.5	21	16
44.5	38.5	19	17
30	33	22	18
33.5	32.5	19	19
30	35	16	20
31	34	15	21
27	29	18	22
33.5	28	16	23
30	29.5	16	24
36.5	31	18	25
26	26	16	26
25.5	27.5	16	27
31	27.5	14	28
25.5	25	16	29
32	30	16	30
21.5	22.5	13	31
21	23.5	14	32
32	24	12	33
26	20	14	34
15	17	11	35
16	19	8	36
23	12	3	37

( 7 )

80	80	-40-	
47.5	56	34	1
51.5	51.5	36	2
45	49	34	3
47	49.5	33	4
36	44.5	31	5
31.5	35	31	6
39	37	32	7
40	42	29	8
43	45.5	28	9
36	41.5	27	10
35.5	40	26	11
40.5	42.5	25	12
39	40	28	13
35	37	24	14
34	38	27	15
38.5	41	25	16
35.5	38.5	23	17
35	38	24	18
31	37.5	23	19
31	35	25	20
39	39	20	21
30	35	22	22
40	35	21	23
31	33.5	21	24
33	33.5	21	25
39	34	20	26
32	34	22	27
31.5	35	21	28
31.5	33	17	29
28	31	14	30
37	31	16	31
30	26.5	14	32
40	37.5	13	33
28.5	34	10	34
12	8	8	35

( 7 )

80	80	40	
50	54	30	1
37.5	42.5	29	2
36.5	40	29	3
33.5	38	29	4
30	35	30	5
31.5	35	32	6
31	34	25	7
32.5	35.5	28	8
33	36.5	26	9
37	35.5	26	10
31	34.5	24	11
35	34.5	25	12
31	33.5	27	13
30	33	28	14
36	35	24	15
31	31	26	16
33	31.5	26	17
24	26	26	18
27.5	26	21	19
26.5	30.5	26	20
28	28.5	25	21
25.5	28.5	23	22
26.5	24	28	23
29	27	21	24
25	25.5	25	25
19	22	23	26
21	23	23	27
24.5	20	21	28
16.5	14.5	23	29
20.5	17	20	30
17	14	10	31
16.5	14.5	16	32
15	13.5	18	33
14.5	13.5	10	34
10	8	10	35

( 7 )

207

148	149	145	1
148	140	158	2
172	170	159	3
140	149	145	4
160	143	166	5
158	133	161	6
140	132	164	7
145	136	158	8
154	133	166	9
173	130	168	10
160	132	145	11
167	152	161	12
151	150	143	13
149	137	130	14
172	165	175	15
164	145	154	16
151	149	145	17
179	172	182	18
146	163	162	19
177	163	173	20
160	161	160	21
156	130	158	22
141	141	154	23
171	163	171	24
158	156	157	25
158	149	157	26
157	126	164	27
146	131	159	28
147	146	163	29
170	170	175	30
160	160	177	31
160	161	155	32
163	141	145	33
143	125	167	34
163	152	165	35

( 7 )

207

195	196	181	1
157	169	169	2
169	120	177	3
165	171	174	4
171	167	172	5
151	168	156	6
160	163	167	7
146	156	163	8
161	160	176	9
177	177	181	10
170	173	173	11
193	178	181	12
167	163	166	13
192	186	181	14
186	180	173	15
179	174	173	16
140	166	171	17
173	161	164	18
172	176	177	19
188	189	177	20
161	149	147	21
183	177	175	22
185	188	188	23
184	184	174	24
174	180	185	25
161	177	176	26
166	163	175	27
151	140	158	28
156	164	167	29
166	168	172	30
175	172	181	31
176	175	176	32
173	171	162	33
159	164	161	34
161	167	185	35

( 7 )

165	154	173	1
174	173	168	2
189	185	179	3
186	187	186	4
177	175	173	5
145	141	151	6
160	160	161	7
149	157	157	8
167	168	162	9
154	166	140	10
141	140	149	11
156	154	158	12
160	152	162	13
163	182	173	14
177	169	163	15
158	162	169	16
159	154	148	17
181	181	191	18
169	161	160	19
178	177	179	20
164	160	156	21
179	181	172	22
163	171	157	23
163	157	173	24
152	153	152	25
146	146	149	26
161	167	155	27
152	143	161	28
161	168	169	29
156	174	150	30
173	173	164	31
142	138	161	32
158	157	147	33
157	159	157	34

( 7 )

207

147	142	173	1
162	169	160	2
190	174	161	3
155	148	165	4
142	162	173	5
161	134	177	6
156	155	149	7
158	150	161	8
170	160	157	9
135	140	139	10
129	127	135	11
139	137	164	12
180	174	176	13
140	153	153	14
194	194	189	15
160	158	149	16
140	133	139	17
159	152	146	18
164	170	161	19
145	126	173	20
176	143	153	21
156	145	156	22
166	164	168	23
158	169	161	24
141	137	164	25
179	179	167	26
155	146	143	27
134	137	160	28
152	147	150	29
166	151	163	30
154	151	173	31
154	158	160	32
148	163	165	33
167	167	169	34
148	147	165	35
162	159	160	36
181	171	171	37

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80-	40-	
50	36	1
52	32	2
44	31	3
35	22	4
60	25	5
37.5	25	6
45	24	7
26	24	8
41	23	9
23	24	10
45	21	11
33	19	12
36	22	13
24	16	14
44	14	15
35	30	16
39.5	29	17
39	28	18
33	26	19
45	20	20
39	19	21
22	10	22
28	8	23
20	33	24
56	29	25
49	30	26
45	25	27
66	21	28
40	24	29
36	14	30

( 7 )

162	169	1
154	148	2
181	191	3
161	160	4
177	179	5
160	156	6
181	172	7
171	153	8
157	173	9
153	152	10
146	149	11
167	155	12
143	161	13
168	169	14
174	150	15
173	164	16
138	161	17
157	147	18
159	157	19
142	173	20
169	160	21
174	161	22
148	156	23
162	173	24
134	177	25
155	149	26
150	151	27
160	139	28
140	146	29
170	189	30

*An-Najah National University*

*Faculty of Graduate Studies*

*The Impact of using critical learning on Achievement Motive of  
Ninth Grade students in physics Science and their Immediate and  
Long-term Achievement in Governmental Schools Belonging to the  
Directorate of Education Tulkarm Government.*

*Prepared by:*

*Iman Kamal Kamel Dauod*

*Supervised by:*

*Dr. Shehadeh Mostafa Abdo*

Submitted in Partial Fulfillment of the Requirements for the Degree of  
Master of Methods of Teaching Sciences, Faculty of Graduate Studies, at  
An-Najah National University, Nablus, Palestine.

**2003**

*The Impact of using critical learning on Achievement Motive of Ninth Grade students in physics Science and their Immediate and Long-term Achievement in Governmental Schools Belonging to the Directorate of Education Tulkarm Government.*

*Prepared by:*

*Iman Kamal Kamel Dauod*

*Supervised by:*

*Dr. Shehadeh Mostafa Abdo.*

**Abstract:**

This study aimed at investigating the impact of using critical learning on Achievement Motive of Ninth Grade Students in Physics Science, and their immediate and long – term achievement in “Heat in our life” subject. The Study attempted to answer the following two main questions:

**First:** What is the impact of using critical Learning Strategy on immediate and long-term achievement of ninth grade students in physics science in Governmental Schools Belonging to the directorate of Education Tulkarm Government.

**Second:** What is the impact of using Critical learning on achievement motive of ninth grade students in Tulkarm Schools.

To answer the questions of the study and test hypotheses the researcher conducted this study on a sample consisting of (141) males and females attending Tulkarm schools.

The students of the study were distributed into four sections in four different schools: two for males, and two for females. Two sections, one for males and one for females, were chosen randomly and sections resented the experimental group, the two sections were taught be using Critical method where as, the other two sections were taught according to traditional method.

A pre-knowledge test was applied to make sure the compatibility between the two groups, its reliability was verified by referees.

A scientific achievement test was prepared on subject of “Heat in our life” its reliability verified by referees, its validity was calculated by Person formula, its value by (test-retest) method was (0.96), and by using kinder-Richardson Formula (20) its value was (0.84).

Achievement motive scale prepared by (Radad, 2000) was applied before the experiment to verity the compatibility between the two groups.

Data was analyzed using one and two ways analysis of variance on factor design (2×2) to test the study hypothesis.

### **Findings:**

- There were statistical significant differences at ( $\alpha = 0.01$ ) level between scientific achievement mean of the students of experimental and control group. In favor of experimental group.
- There were no statistical significant differences at ( $\alpha = 0.01$ ) level between scientific achievement mean of the students due to gender.
- There were statistical significant differences at ( $\alpha = 0.01$ ) level between scientific achievement mean of the students due to time.
- There were statistical significant differences at ( $\alpha = 0.01$ ) level due to interaction between teaching method and gender.
- There were no statistical significant differences at ( $\alpha = 0.01$ ) level in the achievement motive of the students between experimental and control group.
- There were statistical significant differences at ( $\alpha = 0.01$ ) level in the achievement motive of the students due to gender.
- There were statistical significant differences at ( $\alpha = 0.01$ ) level in achievement motive of the students due to interaction between teaching method and gender.
- There were statistical significant differences at ( $\alpha = 0.01$ ) level in achievement motive of the students due to time.

Based on the findings, the researcher recommends to focus on using of critical learning in physics, and in science Courses in general and in other fields of study.