

*

(301)
2005-2004

(%48.2)
(%10.3)

(%41.5)

:

(1)

(Cognitive (Information Processing Habits) -
Learning)

(2)

(3)

(Brain)

(Learning Style)

()

.2005/9/19

2005/3/3

*

(8)

(De Bono, 2003) " "

(4)

(Vertical Thinking)

(Herrman) (Saleh) (Ornstein) (9)

(Springer and Deutsch)

(Gazzaniga, 2002) " "

(5)

(Robin) " "

(10)

(Brain Based Learning

Theory)

(6)

" "

(Thinking Style)

(Jensen, 2000) (7)

(Bogen and " "
(11)(Springer and Deutsch)

Bogen)

" " (Two Hemispheres Brain Theory)

(Right-Brain)

(Roger Sperry)

(Left-Brain)

(Brain Dominance) (Analytical Thinking) :
 (Global Thinking)
 (16)(Sousa)

(17)(Hopper) (12)
 (Whole Brain) ()
 (Left Brain) (Neurologists) - 1

Right (Cerebral Functions)
 (Brain (Creative Thinking) (PET)
 (NMRI) (FMRI)
 (Psychologists) - 2

(18)(McCarthy) " " (Processing (Perception)
 (Learning Style) of Information)
 (Educators) - 3

(14)(Sousa)

(19)
 (20)(Lavach) " "

(15)(Herrman)

Brain Dominance Instrument for Thinking

.Style Assesment)

(Positron Emission -2 -
(PET) Tomorophy)

(Functional

Magnetic Resonance Imaging)

(FMRI)

(21)

(NMRI)

(Soduim Amytal) -3

(John Jackson) "

"

(The Leading Hemispheres)

: " "

(Hugoliepman) " "

(25)" "

(674)

" "

(22)

" "

" "

(23)

(26)

(170)

(24)

: " " -1

(McCarthy) " " -

(Herrman " " -

(27)

" "

(31)

" "

" "

(192)

" "

" "

(171)

(28)()

(304) (475)

(429) (32)

(McCarthy) " "

" "

(29)(Nicola) " "

(20)

(33)

(256)

(HBDI)) " " (%56)

(71) (%13)

(81) (%28) (%31)

(104) (%32)

(%40)

(30)

(-)

(1925) " " (HBDI)

(60-25)

.(301)

2005 - 2004

(1)

(1)

73	.1	
87	.2	
78	.3	
63	.4	
33	.1	
112	.2	
116	.3	
38	.4	
2	.5	
191	.1	
52	.2	
57	.3	
1	.4	
12	.1	
97	.2	
61	.3	
27	.4	
6	.5	
98	.6	

(2)

%48.2	145	
%41.5	125	
%10.3	31	
%100	301	

(3)

%9.6	7	%45.2	33	%45.2	33		
%8.1	7	%40.2	35	%51.7	45		
%10.2	8	%38.5	30	%51.3	40		
%14.2	9	%42.9	27	%42.9	27		
%15.2	5	%60.6	20	%24.2	8		
%7.2	8	%59.8	67	%33	37		
%12.1	14	%26.7	31	%61.2	71		
%10.9	4	%15.8	6	%73.7	28		
%0	-	%50	1	%50	1		
%9.9	19	%46.6	89	%43.5	83		
%9.6	5	%40.4	21	%50	26		
%12.3	7	%26.3	15	%61.4	35		
%0	0	%0	-	%100	1		
%0	-	%50	6	%50	6		
%4.1	4	%29.9	29	%66	64		
%14.8	9	%45.9	28	%39.3	24		
%3.7	1	%59.3	16	%37	10		
%0	-	%83.3	5	%16.7	1		
%17.3	17	%41.8	41	%40.8	40		

(Hemispheres Dominance Inventory Test)

(Test

(30)

- retest)

:

(<http://brain.web-us.com/brain/braindominance.html>)

(34)

(0.93) ()

(18)

(9)

()

(9)

()

(2004)

	(3)	(SPSS)
(1995)	(4)	
(Lavach, 1997)		
(Saleh, 2001)		
(2003)		
(Froehlich et al., 2003)		
(1994)		
(Seng, 2000)	(Nicola, 1994) " "	
" "	(De Bono, 2003)	
(Herman, 1996)	(Springer and Deutsch, 1993)	(2) %48.2 (2)
	(Steinach, 1993)	%41.5
		(0.05 ≥ α)
		%10.3
		(3)

(4)

0.17	0.037-	0.075	0.036	1.000	
0.206-	0.100-	0.244-	1.000	0.036	
0.030	0.230	1.000	0.244-	0.075	
0.099	1.000	0.230	0.100-	0.037-	
1.000	0.099	0.030	0.206	0.017	

(5)

0.925	0.158	3	0.192	
*0.004	3.919	4	6.381	
0.840	0.280	3	0.342	
*0.003	3.697	5	7.525	
-	-	285	116.006	
-	-	300	132.824	

.(0.05 \geq α)

(6)

0.4091	*0.5407	*0.4005	0.1680	-	
0.2411	0.3727	0.2325	-	-	
0.0086	0.1402	-	-	-	
0.1316-	-	-	-	-	
-	-	-	-	-	

.(0.05 \geq α)

(7)

0.2653-	0.3333-	0.16667-	0.2541-	0.1186	-	
*0.3839-	0.4519-	0.2852-	*0.3727-	-	-	
0.0112-	0.0792-	0.0874-	-	-	-	
0.0986-	0.1667-	-	-	-	-	
0.068-	-	-	-	-	-	
-	-	-	-	-	-	

.دال إحصائياً عند مستوى (0.05 \geq α).

(0.206)

(0.05 ≥ α)

.(0.244-)

(Saleh, 2001)

(7)

(McCarthy, 1996)

(Power, 1997) " "

(7)

≥ α)

-1

(0.05

-2

.(Whole Brain)

-3

(5)

-4

(5)

(0.05 ≥ α)

-5

(6)

(FMRI) (PET) :

(NMRI)

(6)

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The Relationship between the Right-brain / Left -brain Dominance and Academic Level, Family Economics, Type of Residence and Speciality among Students of Jordan University of Science and Technology (JUST)

*Basem E. Al-Atom**

ABSTRACT

The aim of this research is to investigate the relationship between the right-brain/left-brain dominance and academic level, family standards of living, type of residence and speciality of students. The sample of this study consists of (301) sociology students from (JUST) in the year 2004/2005.

The sample students were from six faculties at JUST. This study is meant to examine and measure dominance of the right-brain and left - brain hemisphere.

The results of this study illustrated the dominance of the right-brain (48.2%) compared to (41.5%) dominance of the left-brain, whereas the parallel dominance is only (10.3%).

The study concludes with recommendations to activate the functions of right-brain and make more studies on hemispheric dominance among different ages and cultures. It is also recommended that different types of measuring instruments of brain dominance are to be prepared to increase the cooperation among scientists, neurologists and researchers in the field.

Keywords: Right-brain/left-brain dominance, Academic level, Family economics, Type of residence, Specialty.

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