

**Adaptation of the Internal Control Systems with the Use of  
Information Technology and its Effect on Financial  
Statements Reliability  
An Applied Study on the Libyan Commercial Banks**

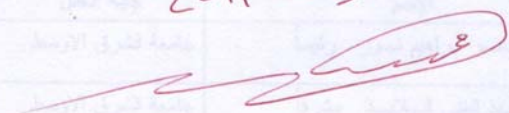
**2011 /2010**

## التفويض

أنا الموقع أدناه محمد علي نصر سالم الشائبي أفوض جامعة الشرق الأوسط بتزويد نسخ من رسالتي ورقياً وإلكترونياً للمكتبات أو المنظمات أو الهيئات أو المؤسسات المعنية بالأبحاث والدراسات العلمية عند طلبها.

الاسم: محمد علي نصر سالم الشائبي

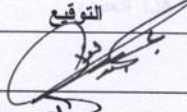
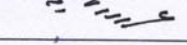
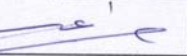
التاريخ: 2011 - 5 - 24

التوقيع:	
التاريخ:	2011 - 5 - 24

## قرار لجنة المناقشة

نوقشت هذه الرسالة وعنوانها: "تكييف نظم الرقابة الداخلية مع استخدام تكنولوجيا المعلومات وأثره على موثوقية القوائم المالية دراسة تطبيقية على المصارف التجارية الليبية"، وأجيزت بتاريخ 2010/5/24.

### أعضاء لجنة المناقشة:

التوقيع	جهة العمل	الإسم
	جامعة الشرق الاوسط	أ. د. عبد الناصر إبراهيم نور رئيساً
	جامعة الشرق الاوسط	د. علي عبد الغني اللايث مشرفاً
	جامعة البترا	د. خالد راغب الخطيب ممتحناً خارجياً





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61	(t) Ho1	4 -4
62		5 -4
64	(t) Ho2	6 -4
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66	(t) Ho3	8 -4
67		9 -4
68	(t) Ho4	10 -4



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# **Adaptation of the Internal Control Systems with the Use of Information Technology and its effect on Financial Statements Reliability**

## **An Applied study on the Libyan Commercial Banks**

**Prepared by:  
Mohammad Ali Nasr Salem Al-Sha'bi**

**Supervised by:  
Dr. Ali Abd Al-Ghani Allayeth**

### **Abstract**

The study aimed at identifying the importance of the internal control and its adaptation with the development of the use of information technology and its effect on financial statements reliability in the Libyan commercial banks. The population of the study consisted of all Libyan commercial banks owned by the country which are (4) banks. Questionnaires have been distributed among them where the researcher has designed a questionnaire targeted the following categories: the financial managers, the internal auditors, the computer sections' employees who work at these banks, ( 122) persons have been distributed on these categories.

The hypotheses of the study were tested using the appropriate statistical methods, which are: Cronbach Alpha, standards deviations and means, One Sample T-(Test).

The results showed high level of adaptation of internal control systems with the development of the use of information technology and its effect on financial statements reliability in the Libyan commercial banks to face the challenges resulted from this development in use, The

average level of the hypothesis, which states that " the adaptation of the internal control systems with the development of the use of information technology in the Libyan commercial banks doesn't lead to have high reliability financial statements", and the hypothesis " the internal control systems don't fit in the use of information technology with the regulations, laws, and legislation in the Libyan commercial banks". The results showed also the average level of the hypothesis which states " there are no difficulties for the adaptation of the internal control systems with the use of information technology in the Libyan commercial banks.

The study recommended several recommendations including the need to issue points of control and supervision of the Libyan banking sector legislation or regulations committed by commercial banks Libyan, in order to improve the reliability of financial statements issued by those banks.

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# Introduction 1.1

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(Daigle; Kizirian & Sneathen, 2008).

## **Problem & Question of the study**

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## **Study Objectives**

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**Study Significance 4.1**

**Study Hypothesis 5.1**

-H<sub>01</sub>

-Ho<sub>2</sub>

-Ho<sub>3</sub>

-Ho<sub>4</sub>

## **Study Limitation**

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## **Study Consititaints**

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## Study Definitions

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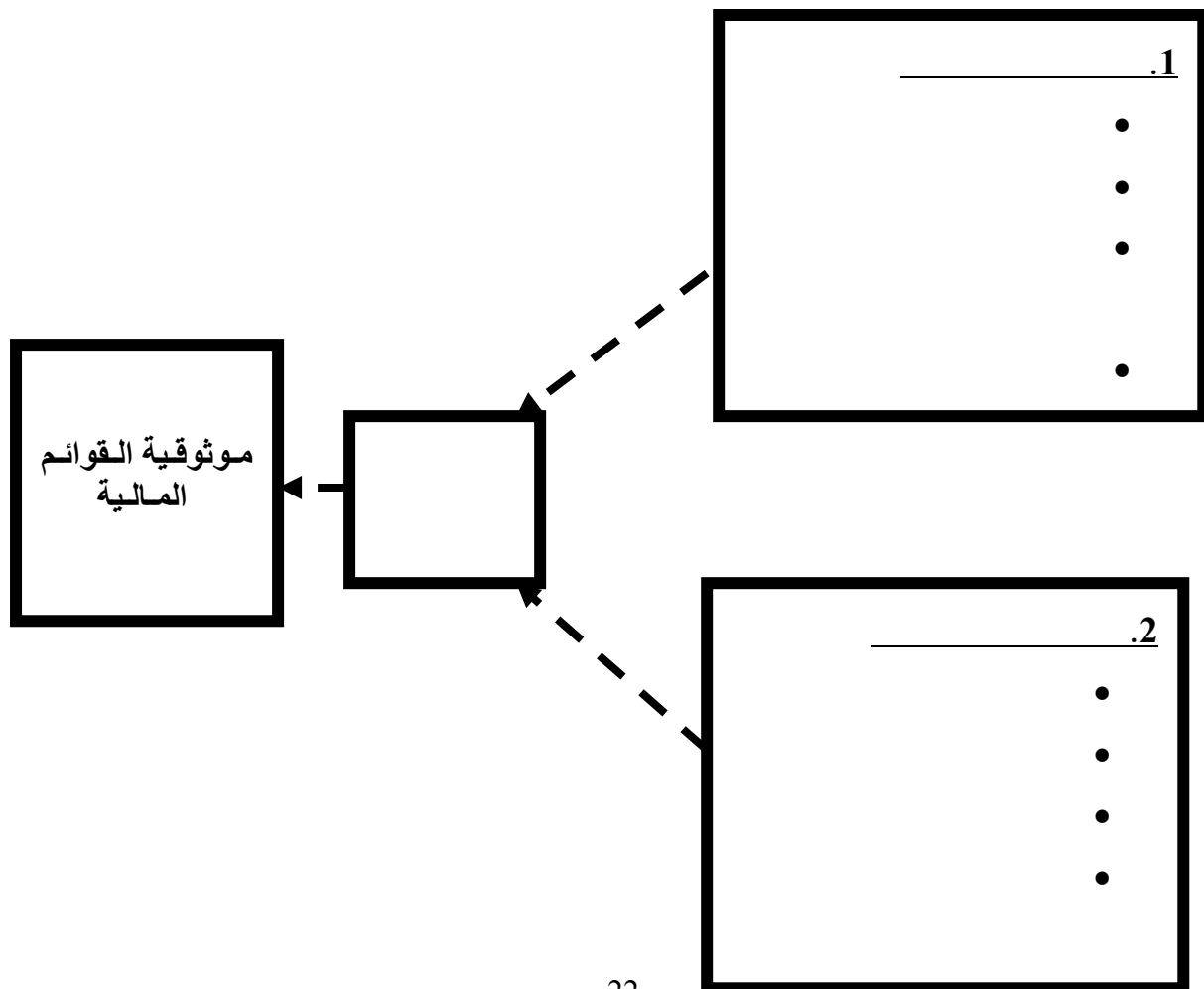
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(Betty, 2001, 41)

### Study Model ( )

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**Introduction**      **1-2**

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**:Information System**

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:(Kieso; Donald; Wwygandt & Waefield, 2001, 38)

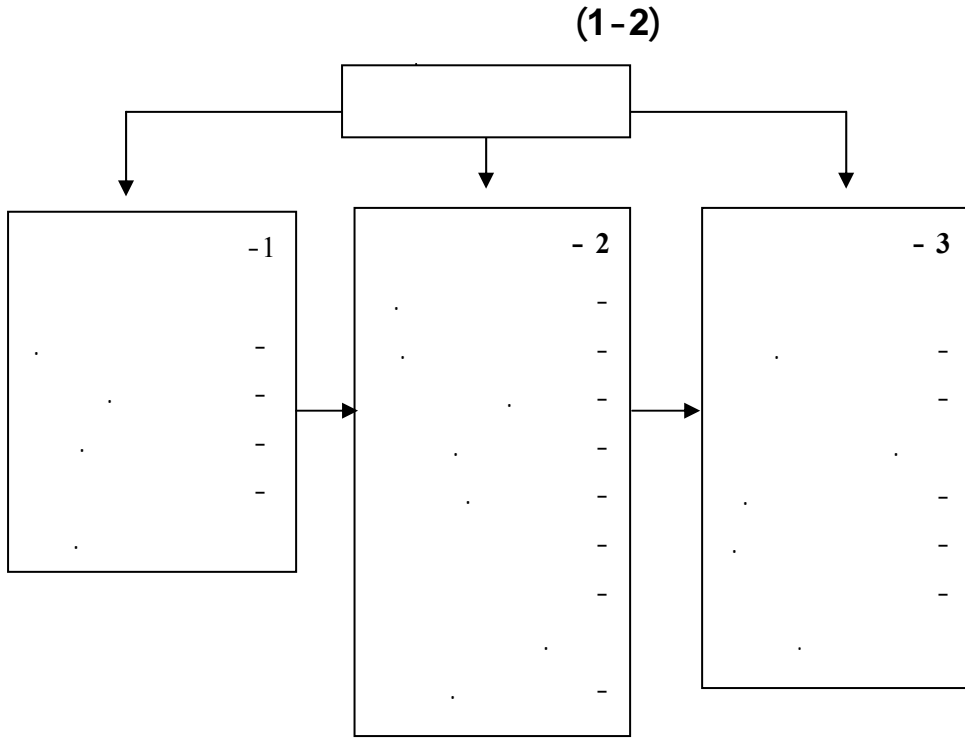
:(Inputs) -1

:(Processing) -2

:(Outputs) -3

**:Accounting Information Systems**

**6-1-2**



(Kieso; Donald; Wwygandt & Waefield, 2001, 68)

**Computerized Accounting**

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**Information System**

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:Input Units -

:Central Processing Unit -

:Output Units -

**:Information Technology**

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International Federation of Accountants (IFAC)

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Arnez & Lopik, )

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:(Abu-Musa, 2008, 39)

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**:Financial Statements Reliability**

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.(Jarnagin, 1992, 15)

:(Kieso & Weyugandt, 1995, 32)

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Wolk & Tearney, 1992,)

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.(Wolk, et al, 1992, 37)

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Information " (Hill; Callahan & Daniel, 2000) .1

" Technology-Related Activities of Internal Auditors

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Internal Control " ( Bae; Epps & Gwathrney, 2003 ) .2

" Issues: The Case of Changes to Information Processes

**System Controls " (Daigle; Kizirian & Sneathen, 2005) .3**

**."Reliability and Assessment Effort**

**(60)**



**An empirical " ( Tuttle & Vandervelde, 2006) .4**  
**examination of CobiT as an internal control framework for**  
**(Cobit ) ." information technology**

(Cobit )

**The Influence Of " (Daigle; Kizirian & Sneathen, 2008) .5**  
**Information Technology Control Activities On The Financial**  
**." Statement Audit**

**Information technology and its " (Abu- Musa, 2008) .6**  
**auditing: An empirical study of Saudi implications for internal**  
**." Organization**

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**Information Technology (It) " (Veerankutty, 2009) .7**

**Related Auditing In Malaysian Public Sector: An Empirical Study of  
." National Audit Department of Malaysia**

**(400)**

**The (E-Auditing) And Its " (Hamdan & Abzka, 2010) .8**

**Effect on Persuasiveness of Evidences: Evidence from Bahrain, paper  
." presented to European**

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5-3 صدق وثبات أداة الدراسة

6-3 المعالجة الإحصائية المستخدمة

7-3

**:Methodology of the study**

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**: Study community**

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: Study sample

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14.8	18			1
24.6	30			
11.5	14			
49.2	60			
75.4	92			2
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6.6	8			
52.5	64			4
11.5	14			
9.8	12			
8.2	10	( )		
18.0	22			
18.0	22	2		5
27.9	34	5	2	
19.7	24	10	5	
34.4	42		10	

			(1-3)	
	(%14.8)			
(%11.5)			(%24.6)	
		(%49.2)		
	(%75.4)			
	(%14.8)			(%3.3)
				(%6.6)
	(%52.5)			
	(%9.8)			(%11.5)
(%18)	( )			(%8.2)
		(%18)		
	(%19.7)		5	(%27.9)
	10	(%34.4)	10	5

**4 -3Study Tool :**



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### 5-3 Validity and stability Study tool:

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0.675		28
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0.791		34
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0.814		

(0.814)

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**6-3 المعالجة الإحصائية المستخدمة : statistical treatment used**

.One Sample T-(Test)

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Likert Scale

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	2
	3 - 2
	3.75 - 3
	4.5 - 3.75
	4.5

**3-4**

4-4

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(SPSS)

(0.05)

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:(H01)

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(3-4)

مرتفع	1	0.73	4.03	) (	1



مرتفع	2	1.08	3.82		2
مرتفع	3	0.88	3.77		3
مرتفع	5	0.81	3.67		4
مرتفع	4	1.09	3.72		5
متوسط	10	1.01	3.20		6
متوسط	9	1.11	3.21		7
متوسط	10	1.15	3.20		8
متوسط	6	0.93	3.66		9
متوسط	8	0.95	3.41		10
متوسط	7	0.88	3.61		11
متوسط		0.64	3.61		

(3-4)

(1)

(4.03 – 3.66)

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(0.73) (4.03) "

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(1.01) (3.20) "

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(t) Ho1

(sig)	(t)	(t)			
0.000	1.96	20.95	0.64	3.82	
			-	2.6	

(t) المحسوبة أكبر من (t)

(4-4)

$0.05 > 0.000 = (sig)$

الجدولية كما أن

: Hal Ho1

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:(H02)

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(5-4)

متوسط	10	1.14	3.28		1
مرتفع	7	0.94	3.74		2
مرتفع	3	0.81	4.03		3
مرتفع	2	0.67	4.18		4

مرتفع	5	0.85	3.85		5
مرتفع	6	0.80	3.77		6
مرتفع	1	0.69	4.23		7
مرتفع	4	0.89	3.97		8
متوسط	8	0.82	3.51		9
متوسط	9	1.10	3.65		10
متوسط		0.76	3.63		

(5-4)

(7) (4.23 - 3.28)

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(1) (0.69) (4.23)

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(1.14) (3.28)

"

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( 6-4)  
اختبار الفرضية الثانية Ho2 بموجب اختبار (t) للعينة الواحدة

(sig)	(t)	(t)			
0.000	1.96	11.51	0.76	3.39	
			-	2.6	

(t)

(t)

(6-4)

$0.05 > 0.000 = (\text{sig})$

: Ha2

Ho2

:

3-4

:(H03)

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(7-4)

متوسط	2	0.91	3.66		1
متوسط	4	0.84	3.61		2
متوسط	7	0.86	3.44		3
مرتفع	1	0.86	3.69		4
متوسط	7	0.78	3.44		5
متوسط	2	0.83	3.66		6
متوسط	11	1.04	3.13		7

متوسط	6	0.86	3.51		8
متوسط	4	0.80	3.61		9
متوسط	9	0.97	3.43		10
متوسط	10	1.04	3.18		11
متوسط		0.73	3.42		

(7-4)

(4) (3.69 - 3.13)

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اختبار الفرضية الثالثة Ho3 بموجب اختبار (t) للعينة الواحدة

(sig)	(t)	(t)			
0.000	1.96	12.31	0.73	3.42	
			-	2.6	

(t)

(t)

(8-4)

$$0.05 > 0.000 = (\text{sig})$$

: Ha3

Ho3

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**4-4**

**:(H04)**

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**(9-4)**

متوسط	8	0.94	3.10		1
مرتفع	3	1.13	3.82		2
مرتفع	2	1.06	4.07		3



مرتفع	1	0.97	4.18		4
متوسط	6	1.07	3.47		5
متوسط	9	1.29	2.56		6
متوسط	4	1.02	3.59		7
متوسط	7	1.20	3.46		8
متوسط	4	1.10	3.59		9
متوسط		0.76	3.34		

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(4) ( 4.18 – 2.56)

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" (6) (0.97) (4.18)

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اختبار الفرضية الرابعة Ho4 بموجب اختبار (t) للعينة الواحدة

(sig)	(t)	(t)			
0.000	1.96	10.84	0.76	3.34	
			-	2.6	

(t)

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(10-4)

$$0.05 > 0.000 = (\text{sig})$$

: Ha4

Ho4



5 - 2 النتائج

5-3 التوصيات

**: Introduction**

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## **: Results 2 - 5**

يمكن تلخيص نتائج التحليل واختبار الفرضيات على النحو التالي:

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**: Recommendations**

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**:References**

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**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Q1	61	2.00	5.00	4.0328	.72955
Q2	61	1.00	5.00	3.8197	1.08794
Q3	61	2.00	5.00	3.7705	.88305
Q4	61	2.00	5.00	3.6721	.81079
Q5	61	1.00	5.00	3.7213	1.09744
Q6	61	1.00	5.00	3.1967	1.01357
Q7	61	1.00	5.00	3.2131	1.11228
Q8	61	1.00	5.00	3.1967	1.15209
Q9	61	2.00	5.00	3.6557	.92889
Q10	61	2.00	5.00	3.4098	.95528
Q11	61	1.00	5.00	3.6066	.88088
m1	61	2.00	4.50	3.6148	.69758
Valid N (listwise)	61				

**One-Sample Test**

Test Value = 2.6						
95% Confidence Interval of the Difference		Mean Difference	Sig. (2-tailed)	df	t	
Upper	Lower	Upper	Lower	Upper	Lower	
1.1934	.8361	1.01475	.000	60	11.361	m1

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Q12	61	1.00	5.00	3.2787	1.14209
Q13	61	2.00	5.00	3.7377	.94695
Q14	61	2.00	5.00	4.0328	.81583
Q15	61	2.00	5.00	4.1803	.67102
Q16	61	2.00	5.00	3.8525	.85315
Q17	61	2.00	5.00	3.7705	.80402
Q18	61	2.00	5.00	4.2295	.69266
Q19	61	2.00	5.00	3.9672	.89382
Q21	61	2.00	5.00	3.5082	1.10488
Q22	61	1.00	5.00	3.6557	.91077
m2	61	2.00	5.00	3.6311	.81599
Valid N (listwise)	61				

**One-Sample Test**

Test Value = 2.6						
95% Confidence Interval of the Difference		Mean Difference	Sig. (2-tailed)	df	t	
Upper	Lower	Upper	Lower	Upper	Lower	
1.2401	.8222	1.03115	.000	60	9.870	m2

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Q23	61	2.00	5.00	3.6066	.84219
Q24	61	1.00	5.00	3.4426	.86650
Q25	61	2.00	5.00	3.6885	.86681
Q26	61	2.00	5.00	3.4426	.78580
Q27	61	2.00	5.00	3.6557	.83437
Q28	61	1.00	5.00	3.1311	1.04044
Q29	61	1.00	5.00	3.5082	.86839
Q30	61	2.00	5.00	3.6066	.80164
Q31	61	2.00	5.00	3.4262	.97398
Q32	61	1.00	5.00	3.1803	1.04096
Q33	61	2.00	5.00	3.0984	.94348
m3	61	2.00	5.00	3.3934	.76439
Valid N (listwise)	61				

**One-Sample Test**

Test Value = 2.6						
95% Confidence Interval of the Difference		Mean Difference	Sig. (2-tailed)	df	t	
Upper	Lower	Upper	Lower	Upper	Lower	
.9892	.5977	.79344	.000	60	8.107	m3

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Q33	61	2.00	5.00	3.0984	.94348
Q34	61	1.00	5.00	3.8197	1.13296
Q35	61	1.00	5.00	4.0656	1.06253
Q36	61	1.00	5.00	4.1803	.97482
Q37	61	1.00	5.00	3.4754	1.07404
Q38	61	1.00	5.00	2.5574	1.29775
Q39	61	1.00	5.00	3.5902	1.02269
Q40	61	1.00	5.00	3.4590	1.20518
Q41	61	1.00	5.00	3.5902	1.10117
m4	61	2.00	5.00	3.4180	.73700
Valid N (listwise)	61				

**One-Sample Test**

Test Value = 2.6						
95% Confidence Interval of the Difference		Mean Difference	Sig. (2-tailed)	df	t	
Upper	Lower	Upper	Lower	Upper	Lower	
1.0068	.6293	.81803	.000	60	8.669	m4

ملحق (4)  
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