

## Measuring the Effect of Auditor Industrial Specialization on Improving Fraud Brainstorming Session Quality

قياس تأثير التخصص الصناعي للمراجع على تحسين جوده  
جلسات العصف الذهنى للغش

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### Abstract:

The research aims to measure the effect of including industrial specialized auditor among audit team fraud brainstorming session on improving session quality; to achieve this objective the researcher relied on analyzing and summarizing related studies that discussed the effect of brainstorming session mechanism on audit team fraud detecting ability, audit quality and audit fee, and auditor industrial specialization effect on fraudulent financial reporting, internal control weakness, audit fee, audit quality, adjusting audit report, litigation risk and improving brainstorming session quality. The research empirical results indicated that brainstorming session tends to increase audit team fraud detecting ability, audit quality and fee. Auditor industrial specialization tends to increase (audit fee – audit quality – fraud risk detection ability) while on the other hand industrial specialization tends to decrease (audit effort – audit risk – litigation risk).

## المخلص:

تسعى هذه الدراسة إلى قياس تأثير وجود مراجع ذو تخصص صناعي ضمن فريق المراجعة أثناء جلسات العصف الذهني للكشف عن حالات الغش في القوائم المالية الخاصة بالعميل بهدف زيادة جودة جلسات العصف. لتحقيق هذا الهدف قام الباحث بدراسة و تحليل الدراسات السابقة المتعلقة بأثر اليات جلسات العصف على قدرة فريق المراجعة في الكشف عن حالات الغش - جودة المراجعة - أتعاب المراجعة، و تأثير التخصص الصناعي للمراجع التقارير المالية الاحتمالية - ضعف نظام الرقابة الداخلي - أتعاب و جودة المراجعة - تعديل التقرير المراجعي - خطر التقاضي و تحسين جودة جلسات العصف الذهني. أظهرت نتائج الدراسة الميدانية أن جلسات العصف الذهني تؤدي إلى زيادة قدرة فريق المراجعة في الكشف عن حالات الغش و زيادة كل من أتعاب وجودة عملية المراجعة، وأيضا يساعد التخصص الصناعي للمراجع في زيادة (أتعاب وجودة المراجعة - قدرة المراجع في الكشف عن حالات الغش)، وعلى الجانب الآخر يؤدي التخصص الصناعي للمراجع إلى خفض (مخاطر المراجعة - خطر التقاضي - المجهود المراجعي المبدول).

## **Section One: Research Framework**

### **First: Introduction and Research problem**

Under statement audit standard SAS no. (99) And international audit standard IAS no. (240)& (315) requirement audit team is required to conduct brainstorming session in their detection for fraud as brainstorming as brainstorming session increase audit team detecting ability for fraud in client financial statements. Also auditor industrial specialization increases auditor detecting ability due to auditor past experience in client environment and cases of material misstatement, auditor industrial specialization effect audit quality, fee, timing, effort, risk. So, including an industrial specialized auditor among audit team fraud brainstorming session will affect session outputs by increasing audit team fraud detecting ability, decreasing audit team timing and effort due to the auditor experience in client industry, increase audit

### **Second: Research objective**

To achieve the research main objective represented in measuring the effect of including industrial specialized auditor among fraud brainstorming session in session quality. The following sub-objectives must be achieved:

- 1- Identifying brainstorming session role in detecting fraud risk and auditor industrial specialization role in managing audit process and related factors.
- 2- Testing the relation between auditor industrial specialization and brainstorming session quality.

### **Third: Research important**

The research important is crystallized in examining the effect of auditor industrial specialization on improving audit team fraud risk detection, increasing audit process quality and audit fee, decreasing audit risk, litigation risk and increasing brainstorming session quality for Egyptian audit firms that includes an industrial specialized auditor among team session group.

### **Forth: Research Hypotheses**

**H1:** There is a significant association between auditor industrial specialization and audit process quality.

**H2:** There is a significant association between auditor industrial specialization and brainstorming session quality.

### **Fifth: Research outline**

**Section one:** Research Framework

**Section two:** literature review

**Section three:** Auditor Industrial Specialization and Fraud Brainstorming Session quality

**Section Four:** Empirical study

## Section Five: Results, Recommendation and Further Research

### Section Two: literature review

No:	Study Title	Author	Year	Study Main Results
1.	How do Brainstorming may Improve Auditor's Ability to Detect Fraud in Australian and US Based Companies?	Prasad R.	2013	<ul style="list-style-type: none"> <li>- Small audit firms have less experience in detecting fraud compared to large companies.</li> <li>- Both audit firms (large – small) when applying fraud brainstorming session result in generating more ideas on how to discover fraud compared to what one independent auditor might have done alone.</li> </ul>
2.	The Effects of Industry Specialization on Audit Quality: An Examination Using Bid-Ask Spreads	Paul C.	2013	<ul style="list-style-type: none"> <li>- Audit quality depends on auditor industrial knowledge, competence and independence.</li> <li>- There is a positive relationship between industry specialization and audit quality.</li> <li>- Auditor specialization effect audit fees positively as auditor has made an investment in obtaining an industry specialization.</li> </ul>
3.	Measuring the Effect of Brainstorming Session on Improving the Auditor Respond to Audit Risk	Mustafa M.	2012	<ul style="list-style-type: none"> <li>- Brainstorming session effect on the auditor adoption to professional skepticism.</li> <li>- Brainstorming session also effect auditor responds to fraud risk.</li> <li>- Auditor must consider brainstorming session process gain and process lose.</li> <li>- Brainstorming session is being applied in Egyptian environment.</li> </ul>
4.	Analyze the Role of Audit Team Brainstorming in Improving the Ability to Detect Fraud and its Effect on Audit Risks	El-Shazly M.	2011	<ul style="list-style-type: none"> <li>- Large size Egyptian audit firms applying brainstorming session have an instructed manual for how to apply brainstorming and insure it's continues during the audit process.</li> <li>- brainstorming session improves audit team fraud risk assessment, professional skepticism attitude, leads to better choose for audit evidence and evidence size gathered during the audit.</li> </ul>
5.	Audit Firm Industry Specialization and Audit Outcomes: Insights from Academic Literature	Habbib A.	2011	<ul style="list-style-type: none"> <li>- Audit firms vary with respect to the quality of services they provide to their clients.</li> <li>- Auditor specialization increases the demand for audit services, improves audit efficiency, effects audit fees and improves financial reporting quality.</li> </ul>
6.	Audit Team Brainstorming, Fraud Risk Identification, and Fraud Risk Assessment: Implications of SAS No. 99	Tina D.	2011	<ul style="list-style-type: none"> <li>- (SAS) No. 99 requires auditors to brainstorm about the possibilities of fraud on all audits.</li> <li>- Audit teams brainstorming generate more quality fraud ideas than individual auditors generate before the brainstorming session.</li> <li>- Fraud risk assessments after brainstorming session are higher than individual auditor's assessments prior to the Brainstorming.</li> </ul>
7.	The Association Between Auditor Industrial Specialization and Firm Disclosure of Internal Control Weaknesses	Rose- Green E. et al.	2011	<ul style="list-style-type: none"> <li>- Firms audited by industry specialist auditors are more likely to report internal control weaknesses (ICWs) than firms audited by non-specialist auditors.</li> <li>- Auditor industry specialization enhances audit process quality and financial reporting integrity.</li> </ul>
8.	Auditor Industrial Specialization and Fraudulent Financial Reporting	Joseph V. And Albert L.	2011	<ul style="list-style-type: none"> <li>- There is a significant negative relation between industry specialization and financial fraud.</li> <li>- Audits quality performed by industry specialist audit firms is high due to audit team industry specific expertise.</li> </ul>

- Based on above discussed studies the researcher concluded that:

- 1- Brainstorming session effect auditor professional skepticism, audit fee, audit quality, auditor responds to fraud risk, fraud risk assessment, audit evidence and evidence size.
- 2- Large Egyptian audit firms apply brainstorming session due to its increased associated costs.
- 3- Audit firms industrial specialization effect audit quality and fee due to auditor related experience to client industry.
- 4- Industrial specialized auditors are more likely to report internal control weaknesses than non-specialized auditor.
- 5- There is a significant negative relation between industry specialization and financial statement fraud.

### **Section Three: Auditor Industrial Specialization and Fraud Brainstorming Session quality**

#### **(1)Brainstorming Related Standards:**

Statement audit standard SAS (99):"Consideration of Fraud in a Financial Statement Audit" states that a brainstorming session must be held among audit team members to evaluate whether there's a risk of material misstatement in the company's financial statements due to fraud as material misstatements affect the overall accuracy of the financial statements. Fraud exists when the misstatements are done deliberately; an error exists when the misstatements are an inadvertent mistake.SAS No. (99) requires

members of the audit team to discuss the potential for material misstatement due to fraud. The discussion should include an exchange of ideas or “brainstorming” among the audit team members about (Tina et al., 2011):

- (1) How and where they believe that an entity’s financial statements might be susceptible to material misstatement due to fraud.
- (2) How management could perpetrate and conceal fraudulent financial reporting.

ISA (315)“*Understand the Entity and it's Environment and Material Misstatement*” require the audit team to discuss the possibility of material misstatement in financial statement due to fraud, and the audit team is required to communicate and share information starting from planning stage till issuing the audit report , and auditor is also

required to use professional judgment and past experience about the firm with the audit team in discuss the possibility of fraud in financial statement which is similar to SAS (99)directions, (Abd El-AzizandKassem, 2010).

The researcher believes that brainstorming can take place during audit planning or during any part of the auditors’ information gathering (and members of the audit engagement are expected to communicate about fraud risk factors throughout the audit until

its completion), and brainstorming is supposed to make the auditor more skeptical and also improve the auditor's fraud risk assessment and search for fraud.

## **(2) Fraud Risk Factors and Auditor Responsibility:**

Fraud is defined according to **IAS no. (240)** as: "An intentional act that results in a material misstatement in financial statements that are the subject of an audit", and take one of the following forms: **(a) Fraudulent Financial Reporting:** Which are intentional misstatements

or omissions of amounts or disclosures in financial statements designed to deceive financial statement users where the effect causes the financial statements not to be presented, in all material respects, in conformity with generally accepted accounting principles (**GAAP**). **(b) Misappropriation of Asset:** It involves the theft of an entity's assets that cause the financial statements not to be presented, in all material respects, in conformity with **GAAP**.

Audit team fraud risk assessment is based on the auditor's expectations of the types of intentional misstatements that may occur and whether the client has programs and controls in place that mitigate the risk of misstatement, auditors response to these fraud risk assessments will include modifying the (nature, timing, and extent) of audit procedures. **SAS No. (99)** discusses fraud risk

factors and classifies them into three key risk factors associated with fraud: (Chong, 2011; John and Martin, 2012).

### **1-Incentives and Pressures:**

Firms are under constant pressure and huge incentives to mismanage earnings to meet the analysts' forecasts, to meet the compensation and incentive structures, to meet the need for the external financing, and to override the unexpected poor financial results.

### **3- Opportunities:**

Arise when circumstances within an entity allow an employee can commit fraud. Employees may have opportunities to commit fraud when there are deficient internal controls or weak corporate governance.

**3- Rationalizations:** Appropriate and clear accounting standards improve accounting transparencies and reporting, thereby reduce the opportunity and attitude toward fraudulent financial reporting , management's integrity, honesty, and ethics are the most important factors in fraud risk assessments, CFOs' attitudes toward fraudulent reporting are a major influence on the possibilities to misreport.

The researcher concludes that the auditor's identification of fraud risks also may be influenced by characteristics such as the size, complexity,

and ownership attributes of the entity. Also, the risks of material misstatement due to fraud may vary among operating locations or business segments of an entity, requiring an identification of the risks related to specific geographic areas or business segments, as well as for the entity as a whole.

### **(3) Auditor Industrial Specialization and Managing Audit Process:**

Auditor industrial specialization effect on different aspect of audit process as Industry specialist auditors are better able to detect errors and misstatements and also auditor industrial knowledge effect: (Audit risk – Audit quality – Audit fee – Earning management – and Assurance services). Auditor industrial specialization also increase auditor self-trust and performance which will effect on financial statement and financial reporting credibility, and the ability to discover and report about any illegal acts or money laundry, and provide number of mechanism that allow auditor to gain client trust and achieve experience above normal, which make the possibility of client leaving the audit firm a tuff and un- required decision, and that can be reflected in increasing auditor ability to detect and report audit risks and financial fraudulent and modified fraudulent financial reporting and developing assurance services

that will effect on increase audit quality and external auditor fee. Audit firm to be industrial specialized( Zaky, 2006; Habib, 2011):

- 1- It must at least audit 10% of firms that belong to his specialization.
- 2- Or 10% audit firm fee received from industrial specialization compared to total audit firm fee.

**(4) Auditor industrial specialization effects on audit process items:**

**1) Audit Firm Evaluation for Audit Risk:** Auditor industrial specialization effect auditor risks and affect three main risks that effect evaluating audit risks as:

**A)Fraud Risk:**

There is a positive relationship between auditor industrial specialization and ability to discover fraud in financial statement, as gained experience from continues auditing firms related to his specialization auditor will be more able to set an appropriate (audit plan – audit procedures – and audit evidence) and less likely to be engaged in fraudulent reporting practices.

**B)Association Risk:**

Association risks include (A)Audit business risk: which are risks related to litigation costs result from failure to perform audit, (B)Client business risk: which are risks related to client ability to continue in the going concern and achieve a return,

auditor can examine the client ability to continue through studying and analyzing (management integrity – competition in the industry – and firm financial attitudes), so specialized auditor who has full understanding of client business risk can easily control audit business risk continually( Zaky, 2006; Habib, 2011).

### **C) Audit Risk:**

Audit risk equation can be examined in [  $AR = IR \times CR \times DR$  ] consequentially this equation is divided into (a) Inherent risk: "auditor industrial specialization will enable him to control inherent risk though designing audit procedures to help him in applying appropriate audit judgment on inherent risk, based on his previous knowledge about client (industry – rules and regulations – and economic situation)" (b) Control risk: "auditor industrial specialization helping determined the appropriate tests to examine the degree of effectiveness of internal control and degree of client commitment to these controls" (c) Detection risk: "as industrial specialized auditor can decrease detection risk through his assessment of inherent risk and control risk".

**2) Increasing Audit Process Quality:** Corporations that have been audited by industrial specialized audit firms are less likely to have information dissymmetry, consequentially decreasing the degree of risk related to providing in accurate information, which lead to increasing audit quality and auditor quality is effected by

the degree of his industrial specialization, so, auditor industrial specialization leads to increasing the level of (professional competition – experience level – development of professional performance – raising up the external audit profession – increasing the external auditor qualification)(Zaky, 2006; Habib, 2011; Lawrence et al., 2011; Mikko, 2011).

**3) Modifying Audit Report:** There is a positive relationship between the degree audit firm industrial specialization and modifying the audit report, the external auditor report about the absence of financial statement of any material misstatement due to error or fraud, is consider as a grantee and main document used by investors in making the correct investment decision, and in case of client collapse or declaring bankruptcy after the issuance of unqualified audit report, is an indicator for poor audit quality, so, industrial specialized auditors have greater motivation to issue high quality and high accurate audit reports, while maintaining audit process quality(Lawrence et al., 2011)

**4) Audit Fee:** The auditor industrial specialization is expected to raise the degree of audit fee of industrial specialized audit firm due to the positive relationship between industry specialization and audit fees. A audit industry specialization is a costly investment, audit firms will require a normal rate of return on those investments. This should be reflected in higher fees for

large compared to small auditors and higher fees for specialists. Empirical evidence, however, is mixed(Habib, 2011).

**5) Reporting Internal Control Weaknesses:** Habib study indicates that there is a positive association between audit firm industrial specialization and ability to report about client internal control weaknesses, (Rose-Green et al., 2011)study shows that there is a positive association between auditor industry specialization and the disclosure of internal control weaknesses (ICWs) by firms that filed first-time Section 404 reports with the Securities and Exchange Commission(SEC), so, industry specialist auditors of firms that filed first-time Section 404 reports with the SEC are more likely to find and report internal control weaknesses than non-specialist auditors.

**(5) The Effect of Auditor Industrial Specialization on Brainstorming Session Quality:**

From previously introduced information. The researcher concludes that auditor industrial specialization is considered and effective mechanism to insure the quality to brainstorming session as industry specialized auditors have more experience and knowledge in client industry – environment – internal control system, which unable him to better understand client and possibilities of material misstatement due to fraud and detect and deter any fraud risk or audit risk before it take place and to

evaluate the client internal control system and avoid any control weaknesses, which will increase the audit firm audit quality and decrease audit effort as auditor know where to search or material misstatement due to fraud and will decrease the possibilities of the audit firm being effected by litigation risk that will effect on the firm reputation and will cause it to lose potential future clients.

**(6) The Effect of Brainstorming Session and Auditor Industrial Specialization on Adjusting Audit Report:**

Researcher can conclude from reading the International audit standard **IAS No. (701)**“*Adjusted Audit Report*” that the: The standard had stated situations that require audit firm to modify its audit report and situations that don't require modifications:

**1-Situation that Don't Require Modifying the Audit Report:**

(unqualified audit report with additional explanatory paragraph) as the auditor need to attack the reader attention toward certain information by adding additional paragraph to the report that won't affect the auditor over all opinion about faire presentation of financial statement, effectiveness of internal control over the financial statement, absence of any material misstatement in the financial statement due to error or fraud, and the client financial statement is prepared in accordance with GAAP. Auditor can add additional paragraph if the client has doubts about going concern,

or in case of uncertainty about certain situation it's results depend on future events that the organization can't control and it effect on the financial statement.

**2-Situations that Require Modifying the Audit Report:** which will result in (qualified – adverse – disclaimer audit opinion), auditor will issue one of these opinions if:(a)There are restrictions on the audit work imposed by management (will result in issuing a qualified or disclaimer audit opinion based on the level of materiality), (b)Conflict with management about applied accounting policies and disclose about these policies in financial statement (will result in issuing qualified or adverse audit opinion based on the level of materiality).

The researcher found that "There is a positive relationship between the degree audit firm industrial specialization and modifying the audit report", the external auditor report about the absence of financial statement of any material misstatement due to error or fraud, is consider as a grantee and main document used by investors in making the correct investment decision, and in case of client collapse or declaring bankruptcy after the issuance of unqualified audit report, is an indicator for poor audit quality, so, industrial specialized auditors have greater motivation to issue high quality and high accurate audit reports, while maintaining audit process quality.

## Section Four: Empirical Study

A questioner has been distributed among study population of (internal and external auditors who participate in Egyptian establishment to examine their point of view about the effect of auditor industrial specialization on audit fee, quality, fraud detection ability, audit risk, fraud risk, audit effort, litigation risk, brainstorming session quality. The study sample contains 112 individuals: 67 auditors and 45 internal auditors who were chosen by simple (random sample) with a respond rate 66.67%. For data analysis the following statistical methods has been used (Relative important – Mann-Whitney test – Quintet Likert Scale – Reliability and validity).

### 1) Frequency Distribution, Relative Importance and Likert attitude:

The following question contains 9 statements about **the existence of industrial specialized auditors among audit team fraud brainstorming session**. Frequency distribution, Relative importance and Likert attitude for every statement were calculated.

Statement		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Relative importance	Weighted mean	Attitude
1-Auditor industry specialization in a certain industry increases the quality of audit process.	Frequency	41	61	9	1	-	85.36	1.73	Strongly Agree
	percentage	36.6	54.5	8	0.9	-			
2-Auditor industry specialization leads to an increase in audit quality and fee.	Frequency	44	53	14	1	-	85	1.75	Strongly Agree
	percentage	39.3	47.3	12.5	0.9	-			

3-Industrial specialization decrease expectation gap.	Frequency	35	56	12	9	-	80.89	1.96	Agree
	percentage	31.2	50	10.7	8	-			
4-Auditor industry specialization increase the quality of assurance services provided to client.	Frequency	40	50	19	3	-	82.68	1.87	Agree
	percentage	35.7	44.6	17	2.7	-			

5-The application of brainstorming session by industrial specialized auditors in client business will increase audit process quality.	Frequency	39	61	8	4	-	84.11	1.79	Strongly Agree
	percentage	34.8	54.5	7.1	3.6	-			

6-The existence of industrial specialized auditor among audit team during brainstorming session will help to decrease audit risks and litigation risks.	Frequency	38	56	18	-	-	83.57	1.82	Agree
	Percentage	33.9	50	16.1	-	-			
7-Auditor industrial specialization helps to better detect and report fraud risk in client financial statement during brainstorming session.	Frequency	35	56	12	9	-	80.89	1.96	Agree
	percentage	31.2	50	10.7	8	-			

8-Industrial specialization during brainstorming session increase audit team ability to disclose and report problems in client internal control system.	Frequency	33	64	11	4	-	82.5	1.88	Agree
	Percentage	29.5	57.1	9.8	3.6	-			
9-Extance of industrial specialized auditor among audit team will increase audit team ability to modify audit report during brainstorming session.	Frequency	46	47	15	4	-	84.11	1.79	Strongly Agree
	Percentage	41.1	42	13.4	3.6	-			
<p>Weighted mean of the fifth pivot is 1.84 such that the general attitude is agree</p>									

The researcher noted that most of sample population agreed (audit firms – GAO – internal auditor) that audit firm industrial specialization in client business will improve audit process leading to an increase in audit quality and ability to detect material misstatement due to fraud and the existence industrial specialized auditor among brainstorming session will lead to better evaluation for the effectiveness and efficiency of client internal control system. While some internal auditors where either neutral or disagree about the

existence of industrial specialized auditor among audit team during brainstorming session will lead to better detection and reporting for fraud risk in client published financial statement.

## **2)Reliability and Validity:**

The reliability of this survey was calculated via Cronbach's Alpha coefficients, which when applying for the research question the result was as following:

Question	Statement	Cronbach's Alpha coefficient	Validity coefficient
1	9	0.889	0.942868

## **3)Statistical Testing Hypotheses:**

**H1:** There is no significant association between auditor industrial specialization and audit process quality.

**H2:** There is no significant association between auditor industrial

specialization and brainstorming session quality.

There is no significance difference between auditor and internal auditor about the effect of auditor industrial specialization on audit process quality and brainstorming session quality	Audit		Internal Auditor	
	Mean	Standard Deviation	Mean	Standard Deviation
1-Auditor industry specialization in a certain industry increases the quality of audit process.	1.66	0.538	1.84	0.767
2-Auditor industry specialization leads to an increase in audit quality and fee.	1.57	0.583	2.02	0.783
3-Industrial specialization decrease expectation gap.	1.84	0.809	2.13	0.919
4-Auditor industry specialization increase the quality of assurance services provided to client.	1.79	0.808	1.98	0.753
5- The application of brainstorming session by industrial specialized auditors in client business will increase audit process quality.	1.7	0.551	1.93	0.915

6-The existence of industrial specialized auditor among audit team during brainstorming session will help to decrease audit risks and litigation risks.	1.67	0.66	2.04	0.673
7-Auditor industrial specialization helps to better detect and report fraud risk in client financial statement during brainstorming session.	1.82	0.886	2.16	0.796
8-Industrial specialization during brainstorming session increase audit team ability to disclose and report problems in client internal control system.	1.85	0.764	1.91	0.668
9-Extance of industrial specialized auditor among audit team will increase audit team ability to modify audit report during brainstorming session.	1.75	0.876	1.87	0.694

Testing hypothesis result of the research question

<b>There is no significance difference between auditor and internal auditor about the effect of auditor industrial specialization on audit process</b>	<b>Mann-Whitney statistic</b>	<b>P-value</b>	<b>Test result</b>
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<b>quality and brainstorming session quality</b>			
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1-Auditor industry specialization in a certain industry increases the quality of audit process.	1341	0.266	<b>No significant difference</b>
2-Auditor industry specialization leads to an increase in audit quality and fee.	1028	0.002	<b>significant difference</b>
3-Industrial specialization decrease expectation gap.	1244	0.089	<b>No significant difference</b>
4-Auditor industry specialization increase the quality of assurance services provided to client.	1274	0.134	<b>No significant difference</b>
5- The application of brainstorming session by industrial specialized auditors in client business will increase audit process quality.	1366	0.345	<b>No significant difference</b>
6-The existence of industrial specialized auditor among audit team during brainstorming session will help to decrease audit risks and litigation risks.	1074	0.005	<b>significant difference</b>

7-Auditor industrial specialization helps to better detect and report fraud risk in client financial statement during brainstorming session.	1117	0.012	<b>significant difference</b>
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8-Industrial specialization during brainstorming session increase audit team ability to disclose and report problems in client internal control system.	1384	0.411	<b>No significant difference</b>
9-Extance of industrial specialized auditor among audit team will increase audit team ability to modify audit report during brainstorming session.	1309	0.202	<b>No significant difference</b>
Testing Hypothesis of third pivot	1070	0.009	<b>significant difference</b>

Source appendix # (5)

From the last table at significance level 0.05 we can reject the null hypothesis "**There is no significance difference between auditor and internal auditor about the There is no significance difference between auditor and internal auditor about the effect of auditor industrial specialization on audit process quality and brainstorming session quality**" in favor of

the alternative hypothesis "There is significance difference between auditor and internal auditor There is no significance difference between auditor and internal auditor about the effect of auditor industrial specialization on audit process quality and brainstorming session quality" and the increase (in agreement attitude ) in favor of auditor.

#### **4) Results of the Empirical study:**

The empirical study had indicated that the existence of industrial specialized auditor among audit team during brainstorming session process will lead to improve audit process and session quality in detecting fraud risk in client financial statement due to industrial auditor specialization and experience in client industry.

### **Section Five: Results, Recommendations and Further Research**

#### **Research Finding:**

The existence of industrial specialized auditor among audit team brainstorming session will improve session quality in detecting fraud risk due to industrial specialized auditor past experience in client industry and cases and formats of fraud risk and auditor industrial specialization tend to increase audit process quality, fee, fraud detection ability, reporting about internal control weaknesses and decrease audit timing, audit risk, litigation risk.

#### **Research Recommendation:**

The audit firms in providing their audit services to the client must include industrial specialized auditor among audit team fraud brainstorming session to insure an increases in session quality and detecting ability for fraud in client financial statement.

**Further research:**

- 1- The role of auditor industrial specialization in facing money laundry crimes.
- 2- Auditor industrial specialization and illegal acts detection.
- 3- The effect on auditor industrial specialization on global audit quality.

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